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2015 Patent Decisions of the Federal Circuit

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2015 Patent Decisions of the Federal Circuit

AREA SUMMARIES

2015 PATENT DECISIONS OF THE FEDERAL CIRCUIT

CRAIG E. COUNTRYMAN*

The Federal Circuit's patent law decisions in 2015 reflected several notable trends. The court decided many novel questions of statutory interpretation, encountered its first round of appeals from the new post-grant Patent Office Proceedings, and continued to wrestle with difficult questions regarding patent-eligibility. Several decisions began implementing the Supreme Court's new directives regarding claim construction, indefiniteness, attorney fees, and inducement. This Article collects and summarizes the Federal Circuit's 2015 patent decisions and analyzes what many of them mean for the future.

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INTRODUCTION

The Patent Act is largely a statute from another era, one in which congressional pronouncements left large interstices for federal judges to fill. Novelty, obviousness, written description, enablement. Judges have historically developed and refined these patentability concepts as they see fit, for the statute provides little guidance or restriction on their authority. Patent law has mostly been common law.

However, 2015 saw the U.S. Court of Appeals for the Federal Circuit resolving many difficult questions of statutory interpretation. Several questions related to the America Invents Act (AIA),¹ which was enacted in 2011, had its post-grant review proceedings begin in 2012,² and switched the United States to a first-to-file system in 2013.³ Appeals requiring the Federal Circuit to interpret the AIA are starting to work their way through the system, and the first crop was ripe for decision this past year. These cases presented many difficult questions about how post-grant proceedings should be conducted (for example, is claim construction to be performed under the broadest reasonable interpretation standard?) and the types of issues in post-grant proceedings that the Federal Circuit has jurisdiction to review. These decisions are just the beginning: as the U.S. Patent and Trademark Office begins to issue first-to-file patents, the AIA's new provisions on prior art will raise many more disputes in the years to come.⁴

The AIA was not the only source of statutory construction decisions. The Federal Circuit interpreted plenty of other existing statutory requirements, including the scope of the Hatch-Waxman Act's safe harbor provision;⁵ the scope of infringement under 35 U.S.C. § 271(g) (2012);⁶ claim interpretation under 35 U.S.C. § 112(f);⁷ whether the Patent Act authorizes a laches defense;⁸ the International Trade Commission's authority to address inducement,⁹ digital communications,¹⁰ and certain domestic industry;¹¹ and the Patent Office's application of the patent term adjustment provisions

1. Leahy-Smith America Invents Act (AIA), Pub. L. No. 112-29, 125 Stat. 284 (2011).

2. *See id.* § 6, 125 Stat. at 305–13.

3. *See id.* § 3, 125 Stat. at 285.

4. *See generally* 35 U.S.C. § 102 (2012), which introduced several new provisions and substantially revised the wording of others from the 1952 Patent Act.

5. *See* *Momenta Pharm., Inc. v. Teva Pharm. USA Inc.*, 809 F.3d 610, 618–22 (Fed. Cir. 2015) (interpreting the safe harbor provision, 35 U.S.C. § 271(e)(1)); *Shire LLC v. Amneal Pharms., LLC*, 802 F.3d 1301, 1309–10 (Fed. Cir. 2015) (same); *Classen Immunotherapies, Inc. v. Elan Pharm., Inc.*, 786 F.3d 892, 894 (Fed. Cir. 2015) (same).

6. *Momenta*, 809 F.3d at 615–18.

7. *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1347–49 (Fed. Cir. 2015).

8. *SCA Hygiene Prods. Aktiebolag SCA Personal Care, Inc. v. First Quality Baby Prods., LLC*, 807 F.3d 1311, 1317–21 (Fed. Cir. 2015) (en banc).

9. *Suprema, Inc. v. Int'l Trade Comm'n*, 796 F.3d 1338 (Fed. Cir. 2015) (en banc).

10. *ClearCorrect Operating, LLC v. Int'l Trade Comm'n*, 810 F.3d 1283 (Fed. Cir. 2015).

11. *Lelo Inc. v. Int'l Trade Comm'n*, 786 F.3d 879 (Fed. Cir. 2015).

for Patent Office delay.¹² In addition, the Federal Circuit issued its first decision interpreting the Biologics Price Competition and Innovation Act,¹³ which established a new expedited pathway for biosimilars.¹⁴ Split panels decided many of these issues, with different judges giving different weight to the statutory text, purpose, and legislative history. Appellate advocates often think about Federal Circuit judges' leanings on patentability, claim construction, or deference to the tribunal below. Last year's cases show that advocates must also consider each judge's approach to statutory interpretation.

The AIA has not only raised new statutory interpretation issues, but it has significantly impacted the Federal Circuit's docket. The Federal Circuit has been flooded with new Patent Office appeals from inter partes review proceedings, many of which are now replacing a co-pending, but stayed, district court case. The result has been a significantly increased workload: the Federal Circuit had almost 200 more Patent Office appeals pending in September 2015 than in the previous year.¹⁵ The Federal Circuit has dealt with this, in part, by affirming without opinion in a significant percentage of these appeals.¹⁶ The few precedential reversals in post-grant proceedings show that the loser in an inter partes review will face difficulty on appeal.

Another continued area of importance is decidedly non-statutory—patent eligibility under 35 U.S.C. § 101. The U.S. Supreme Court acknowledged in *Alice Corp. Proprietary Ltd. v. CLS Bank International*¹⁷

12. *Gilead Scis., Inc. v. Lee*, 778 F.3d 1341 (Fed. Cir. 2015); *Mohsenzadeh v. Lee*, 790 F.3d 1377 (Fed. Cir. 2015); *Daichi Sankyo Co. v. Lee*, 791 F.3d 1373 (Fed. Cir. 2015).

13. Biologics Price Competition and Innovation Act of 2009, Pub L. No. 111-148, §§ 7001–03, 124 Stat. 119, 804–21 (2010).

14. *Amgen Inc. Sandoz Inc.*, 794 F.3d 1347, 1351–52 (Fed. Cir. 2015), *appeal docketed*, No. 15-1195 (U.S. Mar. 23, 2016).

15. *Compare Year-to-Date Activity as of September 30, 2015*, U.S. COURT OF APPEALS FOR THE FEDERAL CIRCUIT, http://www.cafc.uscourts.gov/sites/default/files/the-court/statistics/ytd_activity_9_30_15.pdf (last visited Apr. 7, 2016) (noting that 340 U.S. Patent and Trademark Office (Patent Office) appeals were pending at the time), *with Year-to-Date Activity as of September 30, 2014*, U.S. COURT OF APPEALS FOR THE FEDERAL CIRCUIT, <http://www.cafc.uscourts.gov/sites/default/files/the-court/statistics/ytd%20activity%2009.30.14.pdf> (last visited Apr. 7, 2016) (noting that 162 Patent Office appeals were pending at the time).

16. *See, e.g., Opinions and Orders*, U.S. COURT OF APPEALS FOR THE FEDERAL CIRCUIT, http://www.cafc.uscourts.gov/opinions-orders?populate=&field_origin_value=PATO&field_report_type_value=N&field_date_dropdown=last_6_months (listing all cases affirmed without opinion in the last six months pursuant to Federal Circuit Rule 36); *see also* Fed. Cir. R. 36 (allowing the Federal Circuit to enter a judgment of affirmance without opinion when any of three listed conditions exist).

17. *Alice Corp. Proprietary Ltd. v. CLS Bank Int'l*, 134 S. Ct. 2347 (2014).

that § 101's text makes any "process, machine, manufacture, or composition of matter"¹⁸ eligible for a patent, yet insisted that this includes an "implicit" (read, judicially created) exception for patents that preempt abstract ideas, laws of nature, and natural phenomena.¹⁹ This past year saw the Federal Circuit again struggling to apply the Supreme Court's guidance, invalidating a patent to an admittedly "groundbreaking" type of genetic testing,²⁰ despite the unease of several judges. This struggle also reflected in the Federal Circuit's invalidating a patent on a computer-based invention as an abstract idea,²¹ although it seemed unlike many of the business-based ideas (e.g., hedging) that the Supreme Court has previously targeted as patent-ineligible.²²

Many of the Federal Circuit's other decisions are best described as business as usual. On claim construction, the Supreme Court's decision in *Teva Pharmaceuticals USA, Inc. v. Sandoz, Inc.*²³ has had little practical effect, as most constructions are decided based on the intrinsic evidence, meaning they still receive de novo review. Other Supreme Court decisions have also had minimal effect: *Nautilus, Inc. v. Biosig Instruments, Inc.*²⁴ impacted one indefiniteness decision,²⁵ while *Octane Fitness, LLC v. Icon Health & Fitness, Inc.*²⁶ and *Highmark, Inc. v. Allcare Health Management System, Inc.*²⁷ had little influence on

18. 35 U.S.C. § 101.

19. *Alice Corp.*, 134 S. Ct. at 2354.

20. *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379–80 (Fed. Cir. 2015), *reh'g denied*, 809 F.3d 1282 (Fed. Cir. 2015).

21. *Allvoice Devs. US, LLC v. Microsoft Corp.*, 612 F. App'x 1009, 1018 (Fed. Cir.), *cert. denied*, 136 S. Ct. 697 (2015).

22. *See, e.g., Bilski v. Kappos*, 561 U.S. 593, 612 (2010) (affirming the rejection of a patent application for risk hedging, or protection against risk, as an unpatentable abstract idea and because allowing such a patent would "pre-empt use of this approach in all fields, and would effectively grant a monopoly over an abstract idea").

23. 135 S. Ct. 831 (2015) (holding that the Federal Circuit must apply the clear error standard of review when reviewing a district court's findings on subsidiary factual matters).

24. 134 S. Ct. 2120, 2124 (2014) (holding that a patent is invalid for indefiniteness if "its claims . . . fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention," and eliminating the previous "insolubly ambiguous" standard).

25. *See* Jason Rantanen, *Teva, Nautilus, and Change Without Change*, 18 STAN. TECH. L. REV. 375, 377 (2015) (explaining that following the *Nautilus* decision, the Federal Circuit has held only one claim indefinite under the new standard).

26. 134 S. Ct. 1749, 1758 (2014) (relaxing the standard for attorney fees).

27. 134 S. Ct. 1744, 1748 (2014) (changing the standard of review for fee shifting decisions to abuse of discretion, rather than de novo).

decisions regarding attorney fees.²⁸ The Supreme Court's pronouncements have seemed unimportant to the bottom line because, on remand, the Federal Circuit reinstated its original judgments in both *Teva* and *Nautilus*.²⁹ This is not to say that the new standards have no impact. But change on those issues, to the extent it has occurred at all, has been incremental, not groundbreaking.

There have been plenty of other doctrinal developments, however, to capture the interest of the patent bar. New decisions on the bread-and-butter doctrines of patent law—obviousness, the on-sale bar, written description, inducement, exhaustion, and laches—add plenty of new wrinkles to the doctrines. They also help give us a clue into the performance and leanings of the Federal Circuit's new members. With the confirmation of Judge Kara F. Stoll this year, a majority of active judges are now President Obama's appointees, appointed within the last few years. Those judges often provided critical votes in this year's split decisions, and they will help shape patent law for many years to come.

I. CLAIM CONSTRUCTION

A. *Standard of Review*

The Supreme Court's decision in *Teva* resolved the question that had split the Federal Circuit for almost two decades—what is the appropriate standard of review for claim construction? *Teva* held that, although claim construction is an ultimate issue of law, subject to de novo review, it can also implicate underlying factual questions that are subject to clear error review under Federal Rule of Civil Procedure 52(a)(6).³⁰ The Court added, however, that when claim construction turns solely on the intrinsic evidence it is a purely legal issue: “[W]hen the district court reviews only evidence intrinsic to the patent (the patent claims and specifications, along with the patent's prosecution history), the judge's determination will amount solely to a determination of law, and the Court of Appeals will review that construction de novo.”³¹

28. See Arthur Gollwitzer III, *A Look Back at the Supreme Court's 2013–2014 Term—Is More “Reform” Needed?*, 16 ENGAGE 49, 50 (2015).

29. *Teva Pharm., Inc. v. Sandoz, Inc.*, 789 F.3d 1335, 1338 (Fed. Cir. 2015); *Biosig Instruments, Inc. v. Nautilus, Inc.*, 783 F.3d 1374, 1376 (Fed. Cir.), *cert. denied*, 136 S. Ct. 569 (2015).

30. *Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 835 (2015).

31. *Id.* at 841.

It noted that, in some cases, the district court may "consult extrinsic evidence in order to understand, for example, the background science or the meaning of a term in the relevant art during the relevant time period,"³² but only in situations where the parties offer competing experts or dictionaries must the district court make factual findings.³³ And even if the parties' experts raise a factual dispute over a term's meaning in the relevant art, "the district court must then conduct a legal analysis: whether a skilled artisan would ascribe that same meaning to that term *in the context of the specific patent claim under review*."³⁴

The Supreme Court gave an example to illustrate the difference. The case involved whether the claim term "molecular weight" was indefinite, because it was unclear which of several potential meanings was intended.³⁵ Teva argued that the skilled artisan would understand "molecular weight" in a certain way, but Sandoz argued that Teva's explanation was wrong because it conflicted with Figure 1 of the patent.³⁶ Teva offered an explanation that harmonized its proposed meaning with Figure 1, providing expert testimony to show that the way the data was generated could cause the curve to shift.³⁷ The district court credited Teva's expert, and this was "a factual finding—about how a skilled artisan would understand the way in which a curve created from chromatogram data reflects molecular weights," to which the Federal Circuit had to defer unless clearly erroneous.³⁸ Nevertheless, whether "[F]igure 1 did not undermine Teva's argument that molecular weight referred to the first method of calculation (peak average molecular weight)" was a "legal conclusion"³⁹ reviewable *de novo*, although it would seem that the factual finding would dictate the answer to the legal question.⁴⁰ The Supreme Court thus vacated the Federal Circuit's judgment of indefiniteness and remanded for further consideration under the appropriate standard of review.⁴¹

32. *Id.*

33. *Id.*

34. *Id.*

35. *Id.* at 835–36.

36. *Id.* at 842–43.

37. *Id.* at 843.

38. *Id.*

39. *Id.*

40. *Cf. id.* at 841–42 ("[I]n some instances, a factual finding may be close to dispositive of the ultimate legal question of the proper meaning of the term in the context of the patent.").

41. *Id.* at 843.

The Federal Circuit's decision on remand reveals how little *Teva's* reframing of the standard of review may matter, because it reinstated the judgment of indefiniteness.⁴² The panel majority focused on the intrinsic evidence, which gave no guidance on which measure of molecular weight to use, and which in fact created confusion because the applicant identified two different molecular weight measures in other, related applications.⁴³ The majority stressed that parties cannot transform the interpretation of the patent into a legal question by having experts offer opinions about the intrinsic evidence:

To the extent that Teva argues that the meaning of “molecular weight” in the context of patents-in-suit is itself a question of fact, it is wrong. A party cannot transform into a factual matter the internal coherence and context assessment of the patent simply by having an expert offer an opinion on it. The internal coherence and context assessment of the patent, and whether it conveys claim meaning with reasonable certainty, are questions of law. The meaning one of skill in the art would attribute to the term molecular weight in light of its use in the claims, the disclosure in the specification, and the discussion of this term in the prosecution history is a question of law. . . . To the extent that Teva or the dissent suggests that the specification's disclosure of SEC would “infer” that this claim term, molecular weight, in this patent refers to M_p , such an inference is part of the legal analysis, not a fact finding to be given deference. Determining the meaning or significance to ascribe to the legal writings which constitute the intrinsic record is legal analysis. . . . Determining the significance of disclosures in the specification or prosecution history is also part of the legal analysis. Understandings that lie outside the patent documents about the meaning of terms to one of skill in the art or the science or state of the knowledge of one of skill in the art are factual issues.⁴⁴

The majority thus proscribed a limited role for fact-finding and concluded that, even accepting the district court's findings, the claims were indefinite because the intrinsic evidence did not give enough guidance about which meaning of molecular weight was intended.⁴⁵ Judge Haldane Robert Mayer dissented, explaining that he would have given more weight to *Teva's* expert testimony that “molecular weight” had a clear meaning to the skilled artisan and

42. *Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 789 F.3d 1335, 1337–38 (Fed. Cir. 2015).

43. *Id.* at 1341–45.

44. *Id.* at 1342 (citations omitted).

45. *Id.* at 1344–45.

that, at a minimum, a remand was required to allow the district court to reconsider the issue and make new findings after *Nautilus*.⁴⁶

The upshot is that *Teva* will likely change little, especially in garden-variety claim construction cases. *Teva* did not disturb the *Phillips* approach to claim construction, which gives primacy to the intrinsic evidence.⁴⁷ So the Federal Circuit can simply review claim construction de novo based on the intrinsic evidence and dismiss any extrinsic evidence as legally irrelevant, as it did in the *Teva* remand. Indeed, the Federal Circuit's claim construction decisions this year suggest that it is mostly business as usual.⁴⁸ For example, where evidence was even arguably "extrinsic," the Federal Circuit still applied de novo review because there was no dispute over its content and "what remains is what, if any, significance it might have for the ultimate claim construction, which is a question of law."⁴⁹ Likewise, the mere fact that the district court hears extrinsic evidence does not change the outcome unless the district court actually makes factual findings.⁵⁰

46. *Id.* at 1346–49 (Mayer, J., dissenting).

47. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1317–19 (Fed. Cir. 2005) (en banc).

48. *See, e.g., TomTom, Inc. v. Adolph*, 790 F.3d 1315, 1326 (Fed. Cir. 2015) (refusing to give deference to "findings regarding the distinctions [an inventor] made in the specification and file history between his invention and prior art" because these were part of the intrinsic evidence); *Microsoft Corp. v. Proxyconn, Inc.*, 789 F.3d 1292, 1297 (Fed. Cir. 2015) ("In this case, because the intrinsic record fully determines the proper construction, we review the [Patent Trial and Appeal] Board's [(Board)] claim constructions de novo."); *Cadence Pharms. Inc. v. Exela PharmSci Inc.*, 780 F.3d 1364, 1368 (Fed. Cir. 2015) ("Because the district court's claim constructions were based solely on the intrinsic record, the Supreme Court's recent decision in *Teva* does not require us to review the district court's claim construction any differently than under the de novo standard we have long applied."); *MobileMedia Ideas LLC v. Apple Inc.*, 780 F.3d 1159, 1180 (Fed. Cir.) ("Because the district court's construction relies only on intrinsic evidence, we review its construction *de novo*."), *cert. denied*, 136 S. Ct. 270 (2015); *Pacing Techs., LLC v. Garmin Int'l, Inc.*, 778 F.3d 1021, 1023 (Fed. Cir. 2015) ("Because the only evidence at issue on appeal and presented to the district court in this claim construction was intrinsic, our review of the constructions is de novo."); *FenF, LLC v. SmartThingz, Inc.*, 601 F. App'x 950, 952 (Fed. Cir. 2015) ("We review the district court's claim construction de novo because the intrinsic record—the claims, the specification, and the prosecution history—fully informs the proper construction in this case."); *In re Papst Licensing Dig. Camera Patent Litig.*, 778 F.3d 1255, 1261 (Fed. Cir. 2015) ("In this case, we review the district court's claim constructions de novo, because intrinsic evidence fully determines the proper constructions.")

49. *Info-Hold, Inc. v. Applied Media Techs. Corp.*, 783 F.3d 1262, 1266 (Fed. Cir. 2015).

50. *See Shire Dev., LLC v. Watson Pharms., Inc.*, 787 F.3d 1359, 1368 (Fed. Cir. 2015) ("The [Supreme] Court did not hold that a deferential standard of review is triggered any time a district court hears or receives extrinsic evidence. Here, there is no indication that the district court made any factual findings that underlie its

The only decision where the new standard changed the result was the remand decision in *Lighting Ballast Control LLC v. Philips Electronics North America Corp.*⁵¹ The panel originally applied de novo review, reversed the district court, concluded the term “voltage source means” was subject to 35 U.S.C. § 112(f) because it did not connote sufficient structure, and invalidated the patent as indefinite because the specification did not disclose corresponding structure.⁵² Although the patentee’s “expert testimony suggests that some structure for performing the recited function is implied,” it did not “cure the absence of structural language in the claim itself,” did not “establish that the term ‘voltage source’ was used synonymously with a defined class of structures at the time the invention was made,” and, in fact “suggests a lack of a defined class of structures.”⁵³

On remand, however, the panel reached the opposite result by finding no clear error in the district court’s treatment of the expert testimony.⁵⁴ The panel thought it legally appropriate to rely on extrinsic evidence because it was not being used to contradict the patent.⁵⁵ The panel then noted the district court had found, based on the testimony, that the term would be understood by skilled artisans to connote a “class of structures,” and concluded that this finding was supported by the record.⁵⁶ Contrary to its prior decision, the panel determined that the “expert testimony support[ed] a conclusion that the limitations convey[ed] a defined structure to one of ordinary skill in the art,” and found the term was not subject to § 112(f) “[b]ecause the district court’s factual findings demonstrate[d] that the claims convey[ed] sufficient structure.”⁵⁷

constructions . . .” (citations omitted)); *see also* *CardSoft, LLC v. VeriFone, Inc.*, 807 F.3d 1346, 1350 (Fed. Cir. 2015) (“But as we have repeatedly held after *Teva*, it is not enough that the district court may have heard extrinsic evidence during a claim construction proceeding—rather, the district court must have actually made a factual finding in order to trigger *Teva*’s deferential review.”).

51. 790 F.3d 1329 (Fed. Cir. 2015). The Supreme Court granted certiorari, vacated the prior en banc opinion in *Lighting Ballast Control, LLC v. Philips Electronics North America Corp.*, and remanded for reconsideration in light of *Teva*. *See* *Lighting Ballast Control, LLC v. Universal Lighting Techs., Inc.*, 135 S. Ct. 1173 (2015).

52. *Lighting Ballast Control LLC v. Philips Elecs. N. Am. Corp.*, 498 F. App’x 986, 987 (Fed. Cir. 2013).

53. *Id.* at 991–92.

54. 790 F.3d at 1338–39.

55. *Id.* at 1338.

56. *Id.* at 1339.

57. *Id.*

Lighting Ballast blurred the line between law and fact: whether the expert testimony is legally sufficient to establish that the term “voltage source” connotes sufficient structure appears as though it should be subject to de novo review. The expert’s testimony was unchanged—he said the term connoted a rectifier or a battery, depending on whether AC or DC current was involved.⁵⁸ Perhaps the panel was retracting its earlier de novo interpretation that this testimony merely referred to examples, and accepted the district court’s interpretation that it referred to a closed class of structures. Another consideration that might be at play is, as discussed below, the Federal Circuit’s eliminating of the “strong presumption” that the word “means” in a claim invokes § 112(f),⁵⁹ which had tipped the balance in the prior panel decision.⁶⁰ But *Lighting Ballast* didn’t say that it was this change to the presumption that tipped the balance.

Ultimately, *Teva* changed little in the vast majority of Federal Circuit claim construction appeals this year. The future may be different. Parties will likely start presenting more extrinsic evidence, and district courts will likely start making more explicit factual findings to try to protect their claim construction rulings. In particular, parties can submit expert evidence about what a term means generally in the art, and then argue that the same meaning should apply as a legal matter in the context of the patent. If the district court credits that expert evidence, and there is nothing in the patent to contradict the testimony or suggest a different meaning, that factual finding might be dispositive on appeal, as it was in *Lighting Ballast*. On the other hand, the *Teva* remand decision suggests that the Federal Circuit will be skeptical of experts who try to interpret the patent itself. And the court may always choose to apply de novo review by finding that the intrinsic evidence resolves claim construction, without needing to consult extrinsic sources.

B. Methodology

The Federal Circuit issued over twenty claim construction opinions in 2015. Rather than addressing the particulars of each, it is more useful to group them by a few common themes.

58. *Id.* at 1335, 1339.

59. *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1347–49 (Fed. Cir. 2015) (en banc).

60. *Lighting Ballast Control LLC v. Philips Elecs. N. Am. Corp.*, 498 F. App’x 986, 991 (Fed. Cir. 2013).

One major trend was the continued application of the framework articulated in *Thorner v. Sony Computer Entertainment America LLC*,⁶¹ under which claim language gets its plain meaning to the skilled artisan unless the “exacting” standard for either lexicography or disavowal is met.⁶² Many cases applied these principles to adopt broad constructions of disputed terms.⁶³ But three decisions found

61. 669 F.3d 1362 (Fed. Cir. 2012).

62. *Id.* at 1367–68.

63. *Akamai Techs., Inc. v. Limelight Networks, Inc.*, 805 F.3d 1368, 1372 (Fed. Cir. 2015) (affirming a broad construction that was consistent with the claim language and not limited by the specification of the patentee’s statements in prior litigation), *petition for cert. filed*, 84 U.S.L.W. 3437 (U.S. Jan. 26, 2016) (No. 15-993); *Imaginal Systematic, LLC v. Leggett & Platt, Inc.*, 805 F.3d 1102, 1111–12 (Fed. Cir. 2015) (construing the term “vision guidance system” in a negative limitation broadly, based on ordinary meaning and the specification, and affirming the underlying non-infringement judgment); *Atlas IP, LLC v. St. Jude Med., Inc.*, 804 F.3d 1185, 1189 (Fed. Cir. 2015) (“There is no reason to read that particular embodiment into the claim language.”); *Inline Plastics Corp. v. EasyPak, LLC*, 799 F.3d 1364, 1368 (Fed. Cir. 2015) (“Here, the preferred embodiment is not described as having certain unique characteristics of patentable distinction from other disclosed embodiments. Nor are other embodiments inadequately described in relation to the principles of the invention. Absent such traditional aspects of restrictive claim construction, the patentee is entitled to claim scope commensurate with the invention that is described in the specification.”); *TomTom, Inc. v. Adolph*, 790 F.3d 1315, 1329 (Fed. Cir. 2015) (reversing an overly narrow construction of the claim language and, although finding some parts of the preamble that provided an antecedent basis limited, holding that other parts were not limiting); *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1346 (Fed. Cir. 2015) (“The district court erred in construing these terms as requiring a ‘pictorial map.’ First, the claim language itself contains no such ‘pictorial map’ limitation. . . . While the specification discloses examples and embodiments where the virtual classroom is depicted as a ‘map’ or ‘seating chart,’ nowhere does the specification limit the graphical display to those examples and embodiments.”); *Info-Hold, Inc. v. Applied Media Techs. Corp.*, 783 F.3d 1262, 1267 (Fed. Cir. 2015) (“We find that the claim term ‘transmit’ and the specification support a construction that is neutral as to whether the message playback device or the server initiates the transmission. Nothing in the word ‘transmit’ suggests a limitation on initiation: there is no linguistic ambiguity to resolve. And the specification confirms the term’s neutrality as to initiation.”); *Cadence Pharms. Inc. v. Exela PharmSci Inc.*, 780 F.3d 1364, 1369 (Fed. Cir. 2015) (“We agree with the district court that the plain and ordinary meaning of ‘buffering agent’ is ‘an agent that helps the formulation resist change in pH.’ We see nothing in the intrinsic record to warrant adding requirements of effective concentration or resistance to material change. The statement in the specification that the concentration of the buffer ‘may be’ between 0.1 and 10 mg/ml is not limiting Moreover, the fact that during prosecution applicants added the term ‘buffering agent’ in response to a rejection does not show that the phrase requires a minimum concentration or resistance to material change.”); *In re Papst Licensing Dig. Camera Patent Litig.*, 778 F.3d 1255, 1265 (Fed. Cir. 2015) (“[W]e see nothing to take that embodiment

that the “exacting” standard for disclaimer was met: two based on the specification,⁶⁴ and the other based on the prosecution history.⁶⁵ In each of those cases, the disclaimer involved the patentee either repeatedly distinguishing prior art or using claim language in a definitional way.⁶⁶ By contrast, the mere absence of disclosure in the written description does not constitute disclaimer.⁶⁷

Plain meaning is not a license to expand the claims beyond their proper scope. In particular, a term’s plain meaning must be determined based on the whole intrinsic record, and they have reviewed the entire specification and prosecution history to determine that meaning.⁶⁸ A dictionary cannot be used to establish

outside the reach of the usual rule that claims are generally not limited to features found in what the written description presents as mere embodiments, where the claim language is plainly broader.”).

64. *Openwave Sys., Inc. v. Apple Inc.*, 808 F.3d 509, 517 (Fed. Cir. 2015) (“There is no doubt a high bar to finding disavowal of claim scope through disparagement of the prior art in the specification. In this case, however, it is difficult to envisage how, in light of the repeated disparagement of mobile devices with ‘computer modules’ discussed above, one could read the claims of the patents-in-suit to cover such devices.”); *Pacing Techs., LLC v. Garmin Int’l, Inc.*, 778 F.3d 1021, 1025 (Fed. Cir. 2015) (“The characterization of a feature as ‘an object’ or ‘another object,’ or even as a ‘principal object,’ will not always rise to the level of disclaimer. . . . However, the ’843 patent goes further Immediately following the enumeration of the different objects of the present invention, the ’843 patent states that ‘[t]hose [listed [nineteen] objects] and other objects and features of the present invention are accomplished, as embodied and fully described herein, by a repetitive motion pacing system that includes . . . a data storage and playback device adapted to producing the sensible tempo.’ With these words, the patentee does not describe yet another object of the invention—he alerts the reader that the invention accomplishes *all* of its objects and features (the enumerated [nineteen] and all others) with a repetitive motion pacing system that includes a data storage and playback device adapted to produce a sensible tempo.” (citations omitted)).

65. *Vasudevan Software, Inc. v. MicroStrategy, Inc.*, 782 F.3d 671, 679–80 (Fed. Cir. 2015) (“[A]pplicant stated that the disparate nature ‘refers to’ an absence of common keys or record ID columns of similar value or format. An applicant’s use of the phrase ‘refers to’ generally indicates an intention to define a term Taken in its entirety, the prosecution history is clear that the applicant was relying on the provided definition of ‘disparate databases’ Though it is true that the applicant distinguished Jones on other grounds as well, this does not prevent us from using this particular distinction over Jones to construe the phrase ‘disparate databases.’”).

66. *Openwave*, 808 F.3d at 512; *Vasudevan*, 782 F.3d at 679; *Pacing Techs.*, 778 F.3d at 1024.

67. *In re Papst*, 778 F.3d at 1267 (“This assertion does not suggest a disclaimer of any sort; it merely asserts an absence of something in the written description.”).

68. *Atlas IP, LLC v. Medtronic, Inc.*, 809 F.3d 599, 608 (Fed. Cir. 2015) (“The district court relied entirely on what it viewed as the ‘plain meaning’ of the claim language. The court thought the meaning so plain that it did not even discuss any of the contextual considerations that are often central to claim construction. That was

plain meaning when it conflicts with the intrinsic record.⁶⁹ Claim differentiation cannot be used to broaden a claim in a manner inconsistent with its plain meaning,⁷⁰ and has limited utility in situations where additional evidence points strongly in the other direction.⁷¹ Moreover, when the claim's plain meaning is ambiguous, it is appropriate to look to the specification for guidance.⁷² Although we usually think that a "plain meaning" construction is broader, the Federal Circuit sometimes narrows the construction when applying its plain meaning.⁷³

erroneous. The claim language does not have the decisive plain meaning the district court found, and contextual considerations point compellingly the other way." (internal citation omitted)); *Fenner Invs., Ltd. v. Cellco P'ship*, 778 F.3d 1320, 1322–23 (Fed. Cir. 2015) ("The terms used in patent claims are not construed in the abstract, but in the context in which the term was presented and used by the patentee, as it would have been understood by a person of ordinary skill in the field of the invention on reading the patent documents.").

69. *Kaneka Corp. v. Xiamen Kingdomway Grp. Co.*, 790 F.3d 1298, 1304 (Fed. Cir. 2015) ("Claim construction begins with the language of the claims.... Extrinsic evidence, such as dictionary definitions, for example, may be useful when construing claim terms, 'so long as the dictionary definition does not contradict any definition found in or *ascertained by* a reading of the patent documents'.... A construction that excludes *all* disclosed embodiments, such as the district court's construction of the term 'sealed tank,' is especially disfavored." (citations omitted)).

70. *Enzo Biochem Inc. v. Applera Corp.*, 780 F.3d 1149, 1157 (Fed. Cir. 2015) ("Thus, as claim 1 is limited to indirect detection by its own plain meaning, it would be inappropriate to use the doctrine of claim differentiation to broaden claim 1 to include a limitation imported from a dependent claim, such as direct detection.").

71. *CardSoft, LLC v. VeriFone, Inc.*, 807 F.3d 1346, 1352 (Fed. Cir. 2015) ("Because the ordinary meaning of 'virtual machine' is clear in light of the specification and prosecution history, claim differentiation does not change its meaning."); *Medtronic*, 809 F.3d 599, 607 (Fed. Cir. 2015) ("[W]e have been cautious in assessing the force of claim differentiation in particular settings, recognizing that patentees often use different language to capture the same invention, discounting it where it is invoked based on independent claims rather than the relation of an independent and dependent claim, and not permitting it to override the strong evidence of meaning supplied by the specification.").

72. *Advanced Steel Recovery, LLC v. X-Body Equip., Inc.*, 808 F.3d 1313, 1317 (Fed. Cir. 2015) ("As properly understood, the district court's construction is supported by the claims and specification. The specification does not expressly define 'proximate end.' Yet *every* figure that depicts the disputed connection shows the container packer piston-and-cylinder unit connected to the container packer at the container packer's extreme edge.").

73. *Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1372 (Fed. Cir. 2015) (affirming narrow construction where "the language of the claim itself suggest[ed] that the machine readable instructions [were] used to physically separate the hard-copy prints," "the specification consistently describe[d] the machine readable instruction form as a hard-copy document and thus in no way contradict[ed] the plain meaning of the claim language," and "the prosecution

The Federal Circuit also addressed an important practical point, reaffirming that the district court is not required to further construe a claim term composed of common English words where the court resolves the parties' dispute by rejecting the defendant's narrower construction.⁷⁴

Finally, a court assessing whether there is a substantive change to a claim's scope based on amendments during reexamination simply compares the scope of the original and amendment claims, without regard to why the amendment was made.⁷⁵

All these decisions warrant more scrutiny by lawyers who face new cases with similar claim terms or who want more detail on the facts that led the Federal Circuit to apply the principles discussed above. What is becoming increasingly clear, however, is that a solid majority of Federal Circuit judges are now using the *Thormer* approach to guide their claim construction. *Thormer* was hardly a new test—but it cleverly collected principles that the Federal Circuit had been applying for years in a succinct way, which once again reasserts the primacy of the claim language. District court litigants, especially those wanting broad constructions, will want to frame their arguments in precisely that manner. Litigants who want to rely more heavily on the specification would be well-advised to contest that the

history suggest[ed] that the machine readable instructions must be in hard copy"); *Shire Dev., LLC v. Watson Pharms., Inc.*, 787 F.3d 1359, 1365 (Fed. Cir. 2015) ("These constructions do not reflect the ordinary and customary meaning of the claim terms in light of the intrinsic evidence and are impermissibly broad."); *Enzo Biochem Inc. v. Applera Corp.*, 780 F.3d 1149, 1154 (Fed. Cir. 2015) ("Thus, construing the phrase to allow for a single-component system, as the district court did here, would read out the phrase 'component of a signalling moiety' and would thus impermissibly broaden the claim.").

74. *Summit 6, LLC v. Samsung Elecs. Co.*, 802 F.3d 1283, 1291 (Fed. Cir. 2015) ("At the claim construction stage, the district court rejected Samsung's argument that ongoing activity is required—the heart of the parties' disagreement—and declined to further construe the term because it was a 'straightforward term' that required no construction Because the plain and ordinary meaning of the disputed claim language is clear, the district court did not err by declining to construe the claim term.").

75. *R+L Carriers, Inc. v. Qualcomm, Inc.*, 801 F.3d 1346, 1350 (Fed. Cir. 2015) ("Under the statute and our prior case law, it is irrelevant *why* an amended claim is narrowed during reexamination, or even whether the patentee intended to narrow the claim in a particular way. If the scope of the amended claim is not 'substantially identical' to the scope of the original claim—based on a normal claim construction analysis—per § 252, that fact affects intervening rights. See 35 U.S.C. § 307(b) (2012). The fact that the reason for the amendment during reexamination might not have been for the purpose of narrowing the claim in a particular way does not matter. And, the court is not charged with assessing why a claim might have been narrowed as a predicate to determining whether it has been narrowed.").

term has a single plain meaning (or perhaps any plain meaning at all), or else they will need to meet the “exacting” standards for lexicography or disavowal.

*C. Section 112(6)*⁷⁶

The Federal Circuit also issued several decisions construing a particular type of claim term—means-plus-function limitations subject to 35 U.S.C. § 112(6). The major development was that the en banc court scaled back the presumption that a claim element with the word “means” is subject to interpretation under § 112(6).⁷⁷ Some context on what § 112(6) is and why it matters may help put the issue in context.

The statute, quoted below, permits an applicant to recite a claim element in a generic, functional manner (i.e., as a “means” for carrying out a particular function), but limits the claim’s scope to the structures disclosed in the patent’s specification:

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.⁷⁸

In effect, the statute allows the patent applicant to use a shorthand—rather than muddying the claim with structural detail, the applicant can use a label that incorporates the specification’s more specific structures by reference.

The parties usually have different incentives about whether to argue a claim term is subject to § 112(6). A patentee may want to avoid asserting that the claim is governed by § 112(6) because this limits the claim’s scope—if the defendant’s accused product does not have one of the structures disclosed in the specification (or an equivalent), then there is no infringement. In addition, a patentee whose specification does not include specific structure detail (or, in the case of some software patents, a specific algorithm) may want to avoid § 112(6) treatment because the claim will then be invalid as

76. 35 U.S.C. § 112(6). The AIA amended 35 U.S.C. § 112 to break it into subsections with letters, so what used to be 35 U.S.C. § 112(6) is now officially 35 U.S.C. § 112(f). But this Article refers to the old terminology here because many of the cases still use it.

77. *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1349 (Fed. Cir. 2015) (en banc in relevant part).

78. 35 U.S.C. § 112(6) (2006) (current version at 35 U.S.C. § 112(f) (2012)).

indefinite.⁷⁹ On the other hand, a patentee who wants to avoid prior art and has a detailed specification may want § 112(6) treatment.

Precedent had debated the effect of the patentee's choice to either explicitly include or exclude the words "means for" in a claim. Earlier cases held that the use of the term "means" in the claim created a presumption that § 112(6) applied, while omission of the term "means" created a presumption that it did not apply.⁸⁰ But they applied the presumption flexibly because the ultimate inquiry was whether claim language connoted sufficient structure from which one could conclude that the patentee was not trying to use a shorthand label and incorporate the specification by reference.⁸¹ More recent cases, however, took a more rigid view, describing the presumption as "a strong one that is not readily overcome,"⁸² even adding that "[w]hen the claim drafter has not signaled his intent to invoke § 112, ¶ 6 by using the term 'means,' we are unwilling to apply that provision without a showing that the limitation essentially is devoid of anything that can be construed as structure."⁸³

*Williamson v. Citrix Online, LLC*⁸⁴ reversed this trend, overruling the "strong" presumption and the "essentially devoid of structure" requirement.⁸⁵ The en banc majority was concerned that the presumption had allowed patentees to sneak through too many overly broad, functional claims by omitting the word "means":

Our consideration of this case has led us to conclude that such a heightened burden is unjustified and that we should abandon characterizing as "strong" the presumption that a limitation lacking

79. See, e.g., *Aristocrat Techs. Austl. v. Int'l Game Tech.*, 521 F.3d 1328, 1332 (Fed. Cir. 2008).

80. See, e.g., *Personalized Media Commc'ns, LLC v. Int'l Trade Comm'n*, 161 F.3d 696, 703–04 (Fed. Cir. 1998).

81. *Cole v. Kimberly-Clark Corp.*, 102 F.3d 524, 531 (Fed. Cir. 1996) ("Merely because a named element of a patent claim is followed by the word 'means,' however, does not automatically make that element a 'means-plus-function' element under 35 U.S.C. § 112, ¶ 6 The converse is also true; merely because an element does *not* include the word 'means' does not automatically prevent that element from being construed as a means-plus-function element.").

82. *Inventio AG v. ThyssenKrupp Elevator Ams. Corp.*, 649 F.3d 1350, 1358 (Fed. Cir. 2011); *Lighting World, Inc. v. Birchwood Lighting, Inc.*, 382 F.3d 1354, 1358 (Fed. Cir. 2004).

83. *Flo Healthcare Sols., LLC v. Kappos*, 697 F.3d 1367, 1374 (Fed. Cir. 2012); see also *Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286, 1297 (Fed. Cir. 2014) (explaining that the Federal Circuit has "'seldom' held that a limitation without recitation of 'means' is a means-plus-function limitation").

84. 792 F.3d 1339 (Fed. Cir. 2015).

85. *Id.* at 1348–49.

the word “means” is not subject to § 112, para. 6. That characterization is unwarranted, is uncertain in meaning and application, and has the inappropriate practical effect of placing a thumb on what should otherwise be a balanced analytical scale. It has shifted the balance struck by Congress in passing § 112, para. 6 and has resulted in a proliferation of functional claiming untethered to § 112, para. 6 and free of the strictures set forth in the statute.⁸⁶

Instead, the en banc majority reinstated the presumption as it had been applied before the more recent case law.⁸⁷

The court then held that the limitation “distributed learning control module” was subject to § 112(6).⁸⁸ Although the term did not use the word “means,” the word “module” was effectively a synonym for “means,” and “is simply a generic description for software or hardware that performs a specified function.”⁸⁹ Moreover, the prefix “distributed learning control” did not connote structure, even as read in light of the specification.⁹⁰ Although the claim included high-level detail about the module’s inputs and outputs, it did not concretely explain how it interacted with the other elements in a way that would permit inferences about its structure.⁹¹ Expert testimony that a skilled artisan could program a computer to perform the claimed functions was irrelevant and did not create structure that was missing from the claim itself.⁹² The claim was thus indefinite, as the specification did not disclose any corresponding structure for the limitation either.⁹³

Judge Jimmie V. Reyna wrote separately, and, although he agreed with the en banc majority on this point, he expressed concern about focusing the presumption only on claims that use the term “means,” when the same concerns about functional claims apply to many others that do not use that word.⁹⁴

Judge Pauline Newman dissented, arguing that the statutory language clearly required a patentee to recite an element as a “means for” performing a function to invoke § 112(6) treatment because the

86. *Id.* at 1349.

87. *Id.*

88. *Id.* at 1349–51.

89. *Id.* at 1350.

90. *Id.* at 1351.

91. *Id.*

92. *Id.*

93. *Id.* at 1352–54.

94. *See id.* at 1357–58 (explaining that the statute’s interchangeable use of the words “means” and “step” suggests that the presumption should be equally applicable to either word) (Reyna, J., concurring in part and dissenting in part).

statute refers to an “element . . . expressed as a means or step for performing a specified function.”⁹⁵ The majority was injecting uncertainty into what claims are covered by § 112(6), Judge Newman argued, because instead of simply consulting the claim language, parties can no longer be sure whether § 112(6) applies until they have a judicial interpretation of the language.⁹⁶ She expressed no view on the ultimate question of validity, explaining that it was a different issue than whether the claim is subject to § 112(6) treatment.⁹⁷

Two subsequent decisions seem to suggest that the presumption’s effect has largely disappeared. The first, *Lighting Ballast*, held that the term “voltage source means,” is not subject to § 112(6).⁹⁸ That opinion may be of limited use, though, because it was decided a week after *Williamson*, yet it did not mention the presumption at all, nor did it cite *Williamson*. The second decision, *Media Rights Technologies, Inc. v. Capital One Financial Corp.*,⁹⁹ as discussed further below, held that the term “compliance mechanism” was subject to § 112(6).¹⁰⁰ This opinion suggests that the new law may make a difference: it distinguished prior case law, which had otherwise suggested the term should be subject to § 112(6), because that case law applied the now-overruled “heavy presumption.”¹⁰¹ It is thus notable that the Federal Circuit has applied this weaker presumption to both find a “non-means” claim subject to § 112(6) and a “means” claim not subject to § 112(6).

II. VALIDITY

A. Patent-Eligible Subject Matter

Section 101 continues to present the most difficult set of invalidity issues facing the Federal Circuit. The statute provides that “any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof” is patent-eligible if it meets the other statutory requirements.¹⁰² But the Supreme Court has held that this seemingly broad statutory text contains an “implicit exception,” namely that “[l]aws of nature, natural phenomena, and

95. *Id.* at 1359 (Newman, J., dissenting) (quoting 35 U.S.C. § 112(6) (2012)).

96. *Id.*

97. *Id.* at 1362–63.

98. *Lighting Ballast Control LLC v. Philips Elecs. N. Am. Corp.*, 790 F.3d 1329, 1339 (Fed. Cir. 2015), *cert. denied*, 136 S. Ct. 1226 (Feb. 29, 2016).

99. 800 F.3d 1366 (Fed. Cir. 2015), *cert. denied*, 136 S. Ct. 1173 (2016).

100. *Id.* at 1373.

101. *Id.*

102. 35 U.S.C. § 101 (2012).

abstract ideas are not patentable.”¹⁰³ The purpose of this judicially imposed exception is to prevent “pre-emption” of basic “building blocks of human ingenuity,” which would prevent further scientific advancement.¹⁰⁴ Of course, no one writes patents that explicitly recite one of these basic principles—no one says, “I claim $E = mc^2$.” So the courts have to assess whether a patent has come too close to tying up the principle itself, or is instead a new, patent-eligible application of that principle. And therein lies the challenge.

The Supreme Court has announced a two-step approach for answering such questions. “First, we determine whether the claims at issue are directed to one of those patent-ineligible concepts.”¹⁰⁵ If so, the Court then considers the claim elements, both individually and “as an ordered combination,” to determine if there is an “inventive concept” that is “sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.”¹⁰⁶

Applying this two-step test can be a challenge because the Supreme Court’s precedent deals with relatively easy cases. We know that patenting old business practices is not allowed, even if they are newly implemented on generic computer equipment.¹⁰⁷ We know that you cannot patent isolated DNA, but can patent non-naturally occurring portions of a DNA sequence.¹⁰⁸ And we know that you can patent a method of simply thinking about a naturally occurring correlation between drug metabolite levels and toxicity or efficacy.¹⁰⁹ But, in each of these cases, the “abstract idea,” law of nature, or naturally occurring thing was pretty easy to define, and the patent plainly preempted its use.

103. *Alice Corp. Proprietary Ltd. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2354 (2014) (quoting *Ass’n for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107, 2116 (2013)).

104. *Alice Corp.*, 134 S. Ct. at 2354.

105. *Id.* at 2355.

106. *Id.* at 2355 (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1294, 1298 (2012)).

107. See *Bilski v. Kappos*, 561 U.S. 593, 597–98, 612 (2010) (finding a computer program “instructing buyers and sellers how to protect against risk of price fluctuations” non-patentable because it was an abstract idea rather than a “process”); *Alice Corp.*, 134 S. Ct. at 2356–60 (holding that the method claims requiring generic computer implementation failed to render the abstract idea of risk hedging patent eligible).

108. See *Myriad*, 133 S. Ct. at 2119–20.

109. *Mayo*, 132 S. Ct. at 1296–1302.

Some of the Federal Circuit's 2015 cases dealt with similarly straightforward situations. Two dealt with patents to pricing methods using computers. In particular, *OIP Technologies, Inc. v. Amazon.com, Inc.*¹¹⁰ held that claims that "describe the automation of the fundamental economic concept of offer-based price optimization through the use of generic-computer functions" were invalid because "relying on a computer to perform routine tasks more quickly or more accurately is insufficient to render a claim patent eligible."¹¹¹ Likewise, *Versata Development Group, Inc. v. SAP America, Inc.*¹¹² invalidated claims "directed to the abstract idea of determining a price, using organizational and product group hierarchies," where "the function performed by the computer at each step [was] purely conventional," the claims "d[id] not improve some existing technological process," and the claims "[were] not rooted in computer technology to solve a problem specifically arising in some aspect of computer technology."¹¹³ Both cases fit comfortably within *Alice Corp.*'s prohibition against patents on implementing previously known business activities onto a generic computer.

Another similarly simple issue was presented in *Intellectual Ventures I LLC v. Capital One Bank (USA)*,¹¹⁴ which invalidated method claims to computer-implemented budgeting.¹¹⁵ Under *Alice Corp.* step one, "the patent claims are directed to an abstract idea: tracking financial transactions to determine whether they exceed a pre-set spending limit (i.e., budgeting)."¹¹⁶ That the claims required using a "communication medium," (e.g., the Internet and telephone networks) did not render them any less abstract.¹¹⁷ Moreover, the claims had no "inventive concept" under *Alice Corp.* step two. "The recited elements, e.g., a database, a user profile . . . and a communication medium, are all generic computer elements. Instructing one to 'apply' an abstract idea and reciting no more than generic computer elements performing generic computer tasks does not make an abstract idea patent-eligible."¹¹⁸ A human could have

110. 788 F.3d 1359 (Fed. Cir.), *cert. denied*, 136 S. Ct. 701 (2015).

111. *Id.* at 1362–63.

112. 793 F.3d 1306 (Fed. Cir. 2015), *petition for cert. filed*, 84 U.S.L.W. 3530 (U.S. Mar. 11, 2016) (No. 15-1145).

113. *Id.* at 1333–34.

114. 792 F.3d 1363 (Fed. Cir. 2015).

115. *Id.* at 1368.

116. *Id.* at 1367.

117. *Id.*

118. *Id.* at 1368.

done the same calculations in real time with “pencil and paper,” further underscoring the insignificance of the computer limitations.¹¹⁹

Intellectual Ventures also dealt with a separate patent, however, that presented a somewhat closer case. The claims recited a system for customizing web page content based on the user’s navigation history and other known information.¹²⁰ Under *Alice Corp.* step one, the Federal Circuit determined that “customizing information based on (1) information known about the user and (2) navigation data” was an abstract idea, citing old examples of tailoring newspaper inserts based on a customer’s address and targeting television advertisements based on the time of day (e.g., toy commercials during Saturday morning cartoons and beer commercials during Sunday afternoon football).¹²¹ The Federal Circuit was certainly right that this idea was old, and, at a high level of generality, it looks like a business method. But is the idea really “abstract”?

At *Alice Corp.* step two, the claim’s recitation of generic hardware and software did not provide an inventive concept because “merely adding computer functionality to increase the speed or efficiency of the process does not confer patent eligibility on an otherwise abstract idea.”¹²² The patentee’s reliance on unclaimed limitations to make its claims seem more concrete could not save their validity. This is a warning to litigators not to argue for overly broad claim constructions that leave them without a hook to save the claims from abstractness, and to patent prosecutors, who must write at least some dependent claims with meaty limitations tied to any specific improvement the patentee has made.

Intellectual Ventures is also notable because it distinguished *DDR Holdings, LLC v. Hotels.com, L.P.*,¹²³ the only Federal Circuit case in recent years to uphold claims against a § 101 challenge:

The patent at issue in *DDR* provided an Internet-based solution to solve a problem unique to the Internet that (1) did not foreclose other ways of solving the problem, and (2) recited a specific series of steps that resulted in a departure from the routine and conventional sequence of events after the click of a hyperlink advertisement. The patent claims here do not address problems unique to the Internet, so *DDR* has no applicability.¹²⁴

119. *Id.* at 1368–69.

120. *Id.* at 1369.

121. *Id.* at 1369–70.

122. *Id.* at 1370.

123. 773 F.3d 1245 (Fed. Cir. 2014).

124. *Intellectual Ventures*, 792 F.3d at 1371 (citations omitted).

Defendants will certainly cite this passage in future cases to limit *DDR*'s applicability.

Another decision that further tested the limits of abstractness was *Internet Patents Corp. v. Active Network, Inc.*,¹²⁵ which invalidated claims to a method that enabled users to preserve information they entered into a web browser when the user hit the "back" or "forward" buttons.¹²⁶ The Federal Circuit's articulation of the "abstract idea" to which the claims were directed was striking—"the idea of retaining information in the navigation of online forms."¹²⁷ That does not sound terribly "abstract." It is not a fundamental economic principle or known business practice. Moreover, the court's observation that the claim involved conventional Internet browsers, web forms, and back and forward buttons seems to miss the point. The claims were directed to solving a problem caused by that existing functionality, a problem to which there was apparently no "conventional" solution. Nevertheless, the Federal Circuit's result may be understandable, because the claims covered *any* way of preserving the entered data without specifying any details, even though that step was supposedly the crux of the invention.¹²⁸ That seems too broad, although you have to wonder if § 112, rather than § 101, would be a better vehicle for addressing that overbreadth issue than.

The most controversial § 101 case, however, dealt with a patent to a natural phenomenon. *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*¹²⁹ invalidated a patent to detecting paternally inherited fetal DNA in the mother's bloodstream.¹³⁰ Everyone agreed that this was a remarkable invention that allowed for less invasive prenatal testing, as researchers had previously thrown out this part of the sample, instead examining genetic material obtained from the fetus or placenta, which was riskier to extract.¹³¹ Nevertheless, the panel invalidated the

125. 790 F.3d 1343 (Fed. Cir. 2015).

126. *Id.* at 1348.

127. *Id.*

128. *Id.* The Federal Circuit also invalidated dependent claims that added further limitations about what the system displayed but again did not appear to limit how the system maintained the information that the user inputted into the webpage. *Id.* at 1349 ("The additional limitations of these dependent claims do not add an inventive concept, for they represent merely generic data collection steps or siting the ineligible concept in a particular technological environment.").

129. 788 F.3d 1371 (Fed. Cir. 2015), *reh'd denied en banc*, 809 F.3d 1282 (Fed. Cir. 2015).

130. *Id.* at 1379–80 (disregarding amici suggesting "distinctions among natural phenomena" based upon potential for future innovation).

131. *Id.* at 1373, 1379–80; *see also id.* at 1380–81 (Linn, J., concurring).

claims under *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*'s¹³² two-step test.¹³³ The claims were directed to a natural phenomenon because the circulation of paternally inherited fetal DNA in the mother's blood was nature's handiwork, and the patent did not involve altering any of that genetic information in any way.¹³⁴ Moreover, they lacked any "inventive concept," because the only additional elements involved using known, conventional techniques for detecting and amplifying the DNA.¹³⁵ The panel refused to conduct any separate, freestanding inquiry into preemption because *Mayo*'s two-step framework already accounts for any such considerations.¹³⁶ It also stressed that "the absence of complete preemption does not demonstrate patent eligibility," and refused "to draw distinctions among natural phenomena based on whether or not they will interfere significantly with innovation in other fields now or in the future."¹³⁷ It did not matter that the patentee's invention was scientifically significant, because this alone does not confer patent-eligibility¹³⁸.

While Drs. Lo and Wainscoat's discovery regarding cffDNA may have been a significant contribution to the medical field, that alone does not make it patentable. We do not disagree that detecting cffDNA in maternal plasma or serum that before was discarded as waste material is a positive and valuable contribution to science. But even such valuable contributions can fall short of statutory patentable subject matter, as it does here.¹³⁹

The claims were therefore invalid.

Judge Richard Linn joined the panel decision under compulsion of *Mayo*, but wrote separately to express his concern about the breadth of *Mayo*'s second step.¹⁴⁰ "This case represents the consequence—perhaps unintended—of that broad language in excluding a meritorious invention from the patent protection it deserves and

132. 132 S. Ct. 1289 (2012).

133. *Ariosa Diagnostics*, 788 F.3d at 1375–76.

134. *Id.* at 1376 ("It is undisputed that the existence of cffDNA in maternal blood is a natural phenomenon.").

135. *Id.* at 1377–78.

136. *Id.* at 1379 ("Where a patent's claims are deemed only to disclose patent ineligible subject matter under the *Mayo* framework, as they are in this case, preemption concerns are fully addressed and made moot.").

137. *Id.*

138. *Id.* at 1379–80.

139. *Id.*

140. *Id.* at 1380 (Linn, J., concurring) ("I join the court's opinion . . . only because I am bound by the sweeping language of . . . *Mayo*.").

should have been entitled to retain.”¹⁴¹ *Mayo* had dismissed all “post-solution activity” as irrelevant to patentability, even though it was unnecessary to do so, because the Court could have simply treated those steps as well-known and routine as doctors were already administering the drug, measuring metabolites, and adjusting dosages.¹⁴² “The Supreme Court’s blanket dismissal of conventional post-solution steps leaves no room to distinguish *Mayo* from this case, even though here *no one* was amplifying and detecting paternally-inherited cffDNA using the plasma or serum of pregnant mothers.”¹⁴³ “While the instructions in the claims at issue in *Mayo* had been widely used by doctors—they had been measuring metabolites and recalculating dosages based on toxicity/inefficacy limits for years—here, the amplification and detection of cffDNA had never before been done. The new use of the previously discarded maternal plasma to achieve such an advantageous result is deserving of patent protection.”¹⁴⁴

One could go even further than Judge Linn in distinguishing *Mayo* because the *Mayo* claims did not actually require the doctor to adjust drug dosage—they prevented doctors from so much as thinking about the claimed correlation.¹⁴⁵ In particular, Prometheus had accused a *Mayo* doctor of infringement merely because she had once seen a test report that showed the claimed correlation and might have thought about it during her research into completely different diseases.¹⁴⁶ By contrast, the *Ariosa* claims would not preempt researchers from looking for other sources of fetal genetic material that might provide information—they would only prevent the use of paternally inherited DNA from the mother’s bloodstream.

Ariosa and several amici urged rehearing en banc, but the full court denied the request.¹⁴⁷ Several judges issued separate opinions, however, asking for further Supreme Court guidance.¹⁴⁸ Judge Alan Lourie, joined by Judge Kimberly Moore, agreed that *Mayo* required invalidation of *Ariosa*’s claims, but argued that the claims here were

141. *Id.*

142. *Id.* at 1380–81.

143. *Id.* at 1381.

144. *Id.*

145. *Id.* at 1380–81.

146. Prometheus Labs., Inc. v. Mayo Collaborative Servs., Inc., Civil No. 04cv1200 JAH (RBB), 2008 WL 878910, at *12 n.10 (S.D. Cal. Mar. 28, 2008), *rev’d*, 581 F.3d 1336 (Fed. Cir. 2009), *vacated*, 561 U.S. 1040 (2010), *rev’d*, 628 F.3d 1347 (Fed. Cir. 2010), *rev’d*, 132 S. Ct. 1289 (2012).

147. *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 809 F.3d 1282 (Fed. Cir. 2015).

148. See *id.* at 1284 (Lourie, J., concurring); *id.* at 1287 (Dyk, J., concurring); *id.* at 1293 (Newman, J., dissenting).

not the type of nature law or abstract idea that should be unpatentable.¹⁴⁹ “The claims rely on or operate by, but do not recite, a natural phenomenon or law.”¹⁵⁰ Instead, they are “directed to an actual use of the natural material of cffDNA,” “recite innovative and practical *uses* for it, particularly for diagnostic testing,” and recite an activity (testing paternal inherited DNA) that was “*not* routine and conventional.”¹⁵¹ Although the claims might seem overly broad or vague, any concerns here could be addressed with “the finer filter of § 112.”¹⁵² Moreover, the patents did not involve an abstract idea— “[t]here is nothing abstract about performing actual physical steps on a physical material.”¹⁵³ “And if the concern is preemption of a natural phenomenon, this is, apparently, a novel process and that is what patents are intended to incentivize and be awarded for.”¹⁵⁴

Judge Timothy Dyk also wrote separately to identify a potential problem with the *Mayo/Alice Corp.* two-step approach. He thought the approach “works well when the abstract idea or law of nature in question is well known and longstanding,” and, in such circumstances, “there is no basis for attributing novelty to that aspect of the claimed invention.”¹⁵⁵ He also thought the approach “works well with respect to abstract ideas,” because “claims to business methods and other processes that merely organize human activity should not be patent eligible under any circumstances.”¹⁵⁶ Nevertheless,

there is a problem with *Mayo* insofar as it concludes that inventive concept cannot come from discovering something new in nature— e.g., identification of a previously unknown natural relationship or property. . . . [A]n inventive concept can come not just from creative, unconventional application of a natural law, but also from the creativity and novelty of the discovery of the law itself.¹⁵⁷

This was not to say that a newly discovered natural law should be patentable in its entirety—the claim should be “limited to a specific application of the new law of nature discovered by the patent

149. *Id.* at 1284–85 (Lourie, J., concurring).

150. *Id.* at 1286.

151. *Id.*

152. *Id.*

153. *Id.* at 1286–87.

154. *Id.* at 1287.

155. *Id.* at 1288–89 (Dyk, J., concurring).

156. *Id.* at 1289.

157. *Id.*

applicant and [actually] reduced to practice.”¹⁵⁸ And, with that in mind, Judge Dyk did not think his approach would change the result here given the breadth of Ariosa’s claims.¹⁵⁹

Judge Newman dissented to the denial of rehearing.¹⁶⁰ She agreed with Judges Lourie, Moore, and Linn that the claims should be patentable but did not think that *Mayo* precluded this result.¹⁶¹

Whether or not *Mayo* drew an appropriate line in that case, particularly in view of the specificity of the diagnostic method that was developed, this decision does not require the drawing of a different line on quite different facts. In the case now before us, the claimed method was not previously known, nor the diagnostic knowledge and benefit implemented by the method.¹⁶²

In her view, the claims covered not the scientific fact that fetal DNA circulates in the mother’s blood, but “a new diagnostic method of using this information.”¹⁶³ “Precedent does not require that all discoveries of natural phenomena or their application in new ways or for new uses are ineligible for patenting; the [Federal Circuit] has cautioned against such generalizations.”¹⁶⁴

We will have to wait to see whether the Supreme Court once again intervenes to address the concerns in these opinions. It seems like the Court will have to do so soon. As Judge Lourie put it, “[a]ll physical steps of human ingenuity utilize natural laws or involve natural phenomena,” so “those steps cannot be patent-ineligible solely on that basis because, under that reasoning, nothing in the physical universe would be patent-eligible.”¹⁶⁵ The same can be said for abstract ideas, because every patent claim can be reduced to any “abstract idea” if you rephrase it at a high enough level of generality. Current law threatens to swallow the whole of patent law. Something should be done. Soon.

B. Anticipation

The Federal Circuit addressed four interesting anticipation issues in 2015. The first was in *Ineos USA LLC v. Berry Plastics Corp.*,¹⁶⁶ which

158. *Id.* at 1291.

159. *Id.* at 1293.

160. *Id.* (Newman, J., dissenting).

161. *Id.*

162. *Id.* at 1294.

163. *Id.*

164. *Id.*

165. *Id.* at 1285 (Lourie, J., concurring).

166. 783 F.3d 865 (Fed. Cir. 2015).

dealt with the patentability of a composition claim that specified a range of concentrations for each ingredient.¹⁶⁷ The claim required a composition with a lubricant in the amount of 0.05%-5% by weight.¹⁶⁸ The issue was whether the prior art similarly disclosed a range or instead disclosed particular points within the range because “[w]hen a patent claims a range, as in this case, that range is anticipated by a prior art reference if the reference discloses a point within the range.”¹⁶⁹ By contrast, if “the prior art discloses its own range, rather than a specific point, then the prior art is only anticipatory if it describes the claimed range with sufficient specificity such that a reasonable fact finder could conclude that there is no reasonable difference in how the invention operates over the ranges.”¹⁷⁰ Here, the prior art disclosed the latter, because it disclosed lubricants in quantities of “at least” 0.1%, 0.2%, or 0.4% by weight, but “[did] not exceed” 5% by weight, and those terms denoted three ranges.¹⁷¹ However, the claim was still invalid because the patentee put in no evidence that the claimed range operated differently than the prior art range.¹⁷² The patent said that the lubricant made it easier to unscrew a bottle cap, and there was no evidence that the claim range was different than the prior art in that regard; testimony that the claimed range reduced manufacturing costs and eliminated blemishes was irrelevant.¹⁷³ Another claim limitation required 0-0.15% of a secondary lubricant, and the prior art disclosed this because it had no secondary lubricant and thus disclosed a point in the range—0%.¹⁷⁴ Finally, the prior art disclosure of a small genus of fatty acids disclosed a third disputed claim limitation, which required a specific fatty acid that fell within that genus.¹⁷⁵

A second case dealt with how the Patent Office can use the applicant’s specification when assessing anticipation. *In re Morsa*¹⁷⁶ held that the Patent Trial and Appeals Board (Board or PTAB) correctly used the specification’s description of the skilled artisan’s

167. *Id.* at 867.

168. *Id.*

169. *Id.* at 869.

170. *Id.*

171. *Id.*

172. *Id.*

173. *Id.* at 870–71.

174. *Id.* at 871.

175. *Id.* at 871–72.

176. 803 F.3d 1374 (Fed. Cir. 2015).

knowledge to find that a prior art reference was enabling.¹⁷⁷ “There is a crucial difference between using the patent’s specification for filling in gaps in the prior art, and using it to determine the knowledge of a person of ordinary skill in the art.”¹⁷⁸ The former is permitted, while the latter is off-limits. Judge Newman dissented, arguing that “gaps in the prior art cannot be filled by the invention at issue.”¹⁷⁹

*Kennametal, Inc. v. Ingersoll Cutting Tool Co.*¹⁸⁰ turned on whether the prior art reference disclosed a sufficiently small genus to anticipate a claim to the species.¹⁸¹ Substantial evidence supported the Board’s conclusion that it did.¹⁸² The claims required a combination of a cutting insert with a ruthenium binder and a PVD coating.¹⁸³ The prior art disclosed ruthenium as one of five metals and three coating techniques (which included PVD but not in the working examples).¹⁸⁴ The patentee argued that this resulted in over 10,000 possibilities (if you counted combinations with multiple metals or multiple coatings).¹⁸⁵ However, the defendant’s evidence showed that a skilled artisan would have envisioned only the combinations with one metal and one binder, especially because the prior art patent had a claim to that arrangement.¹⁸⁶ That cut the total number of combinations significantly, which was enough to anticipate, even though all of the prior art patent’s working examples involved other metals and coatings.¹⁸⁷

Finally, *In re DiStefano*¹⁸⁸ dealt with the “printed matter doctrine,” under which a limitation covering “(a) printed matter that (b) is not functionally or structurally related to the physical substrate holding the printed matter” gets no patentable weight.¹⁸⁹ With respect to the

177. *Id.* at 1377.

178. *Id.* at 1378.

179. *Id.* at 1381 (Newman, J., dissenting).

180. 780 F.3d 1376 (Fed. Cir. 2015).

181. *Id.* at 1382.

182. *Id.*

183. *Id.* at 1378.

184. *Id.* at 1380.

185. *Id.* at 1381–82.

186. *Id.* at 1382–83.

187. *Id.* The Federal Circuit also held the same prior art rendered the claims obvious: “While references that anticipate an invention can, theoretically, still not make it obvious, that is the rare case.” *Id.* at 1385 (citation omitted). This was not the rare case given the evidence discussed above, and any unexpected results were not due to the claim invention, given that the prior art already disclosed this combination. *Id.*

188. 808 F.3d 845 (Fed. Cir. 2015).

189. *Id.* at 848.

first prong, “a limitation is printed matter only if it claims the content of information.”¹⁹⁰ The doctrine dates to an 1869 case, which held that coupons with various kinds of stamps and figures were not patentable.¹⁹¹ As the Federal Circuit’s predecessor court put it in 1931, “[t]he mere arrangement of printed matter on a sheet or sheets of paper, in book form or otherwise, does not constitute any new and useful art, machine, manufacture, or composition of matter, or any new and useful improvements thereof.”¹⁹² The rule is limited “to matter claimed for its communicative content.”¹⁹³ Applying these principles, the Federal Circuit reversed an anticipation rejection for a patent to a method of designing web pages because a limitation to the “origin” of certain “web assets” (e.g., “Java applets”) was not printed matter.¹⁹⁴ “Although the selected web assets can and likely do communicate some information, the content of the information is not claimed.”¹⁹⁵ The Board thus committed legal error in not giving those limitations any patentable weight.¹⁹⁶

C. On Sale Bar

The Federal Circuit decided an on sale bar case this year that could have a major impact on patentees who outsource their manufacturing, especially pharmaceutical companies. In *Medicines Co. v. Hospira, Inc.*,¹⁹⁷ the panel determined the patentee’s purchase of its patented product from an outside manufacturer more than a year before its filing date was an invalidating sale.¹⁹⁸ Citing *D.L. Auld Co. v. Chroma Graphics Corp.*,¹⁹⁹ the panel rejected the patentee’s arguments that there was no sale, even though the patentee always retained title to its product, and was only paying for manufacturing services:

We find no principled distinction between the commercial sale of products prepared by the patented method at issue in *D.L. Auld Co.* and the commercial sale of services that result in the patented product-by-process here. The Medicines Company paid Ben Venue for performing services that resulted in the patented product-by-

190. *Id.*

191. *Id.* at 849 (citing *Ex parte Abraham*, 1869 Dec. Comm’r Pat. 59).

192. *Id.* (quoting *In re Russell*, 48 F.2d 668, 669 (C.C.P.A. 1931)).

193. *Id.*

194. *Id.* at 851.

195. *Id.*

196. *Id.*

197. 791 F.3d 1368 (Fed. Cir. 2015), *vacated*, 805 F.3d 1357 (Fed. Cir. 2015).

198. *Id.* at 1372–73.

199. 714 F.2d 1144 (Fed. Cir. 1983).

process, and thus a 'sale' of services occurred As in *D.L. Auld Co.*, the sale of the manufacturing services here provided a commercial benefit to the inventor more than one year before a patent application was filed. Ben Venue's services were performed to prove to the FDA that The Medicines Company's product met the already-approved specifications for finished bivalirudin product. Additionally, Ben Venue marked the batches with commercial product codes and customer lot numbers and sent them to The Medicines Company for commercial and clinical packaging, consistent with the commercial sale of pharmaceutical drugs. This commercial activity was not insignificant; The Medicines Company admits that each batch had a commercial value of over \$10 million.²⁰⁰

The panel further relied on *Special Devices, Inc. v. OEA, Inc.*,²⁰¹ which held that there is no "supplier" exception to the on-sale bar.²⁰²

The panel also rejected the patentee's argument that the case involved an "experimental" use.²⁰³ The products it purchased satisfied all the claim limitations, so it did not matter whether the patentee knew at the time that it was within the claims.²⁰⁴ "[I]f a product that is offered for sale inherently possesses each of the limitations of the claims, then the invention is on sale, whether or not the parties to the transaction recognize that the product possesses the claimed characteristics."²⁰⁵ The panel also observed that there can be no experimental use after a reduction to practice, and that, although reduction to practice does not occur until the inventor appreciates what he has done, that was not the situation here.²⁰⁶ The claims were thus invalid as a matter of law.

The Federal Circuit has subsequently granted rehearing en banc, with the briefing and argument to occur in 2016. The Federal Circuit's en banc order lays out several questions:

(a) Do the circumstances presented here constitute a commercial sale under the on-sale bar of 35 U.S.C. § 102(b)?

(i) Was there a sale for the purposes of § 102(b) despite the absence of a transfer of title?

200. *Meds. Co.*, 791 F.3d at 1371 (citations omitted).

201. 270 F.3d 1353 (Fed. Cir. 2001).

202. *Id.* at 1357; *Meds. Co.*, 791 F.3d at 1371.

203. *Meds. Co.*, 791 F.3d at 1372.

204. *Id.*

205. *Id.* at 1371 (quoting *Abbott Labs. v. Geneva Pharm., Inc.*, 182 F.3d 1315, 1319 (Fed. Cir. 1999)).

206. *Id.* at 1372-73.

(ii) Was the sale commercial in nature for the purposes of § 102(b) or an experimental use?

(b) Should this court overrule or revise the principle in [*Special Devices*], that there is no “supplier exception” to the on-sale bar of 35 U.S.C. § 102(b)?²⁰⁷

The questions reflect both unease with the panel’s result and the analytical difficulty of figuring out how to reverse it. The panel’s rule creates a disparity between patentees with in-house manufacturing capabilities (and will never have an on-sale bar problem) and patentees who outsource it (and must be constantly vigilant). There is no reason to treat those two situations differently. Moreover, targeting a patentee’s purchase of its patented invention from a supplier does not seem to fit with the purposes of the on-sale bar, which are to ensure an inventor promptly files its patent application once it is commercially exploiting the invention and to prevent removal of existing knowledge from public use.²⁰⁸ A patentee’s purchase of its patented product from a supplier does not remove any knowledge from the public domain—only its subsequent sales to customers would do that. Here, although the panel noted that the products at issue were for eventual commercial distribution, there is no evidence that happened more than a year before the patent filing. So the transactions in this case should not have been invalidating under 35 U.S.C. § 102(b).

But what is the best way to design the doctrine to achieve that result? The easiest way would be to create a “supplier exception” to the on-sale bar and overrule *Special Devices*. But there is no support in the statutory text for such an exception—§ 102(b) refers to any transaction in which the invention is “on sale.”²⁰⁹ The text is not limited to situations where the patentee is the seller (rather than the buyer), or circumstances where someone is selling the product to an end-customer. Maybe a historical analysis would reveal that the on-sale bar was traditionally applied to sales to end users, allowing the argument

207. *The Meds. Co. v. Hospira, Inc.*, 805 F.3d 1357, 1358 (Fed. Cir. 2015) (per curiam).

208. *See Pfaff v. Wells Elecs., Inc.*, 525 U.S. 55, 64 (1998) (“A similar reluctance to allow an inventor to remove existing knowledge from public use undergirds the on-sale bar.”). *See generally* Frank Albert, *Reformulating the On Sale Bar*, 28 HASTINGS COMM. & ENT. L.J. 81 (2005) (discussing the current state of the on sale bar, its practical impact on commercial activity, its weaknesses, and proposed reformulations to the on sale bar).

209. 35 U.S.C. § 102(b) (1952).

that Congress should be understood to have codified that understanding in the 1952 Patent Act. But the statute does not say that.

Another option is limiting a “sale” under § 102(b) to situations in which a transfer of title occurs. There is some support for this proposition, as the Federal Circuit has tied a “sale” to the transfer of “title or property” in other contexts.²¹⁰ But it seems overly formalistic, and it raises the question of whether you can have a transfer of “property” (e.g., the batches of drug here) without a transfer of title. Requiring a title transfer might also be overly inclusive and carve otherwise commercial transactions outside of the “on sale” bar—could a patentee now avoid the bar by providing its customers a product yet retaining title? That seems unlikely, and anyway, the invention would likely still be in “public use,” so the transaction would still be invalidating.

The last option is experimental use, but this is also tricky because although the batches were initially tested for FDA approval, they were ultimately resold to outside customers.²¹¹ Perhaps such a dual-purpose transaction could be dealt with by exempting the initial transaction, but then treating the patentee’s subsequent sales to customers as commercial sales potentially subject to § 102(b), if they are more than a year before the patent filing. Even if you circumvent that initial problem, there can still be no experimental use before the inventors had already reduced their invention to practice because they appreciated that it worked for its intended purpose.

So the path to setting aside the panel’s decision may be challenging. But we must hope that the Federal Circuit will find a way because it makes no sense to punish patentees for outsourcing their manufacturing.

D. Public Use

The Federal Circuit sustained a district court’s finding of no invalidating public use in *Delano Farms Co. v. California Table Grape*

210. See, e.g., *Halo Elecs., Inc. v. Pulse Elecs., Inc.*, 769 F.3d 1371, 1379 (Fed. Cir. 2014) (“We have stated that ‘the ordinary meaning of a sale includes the concept of a transfer of title or property.’” (quoting *NTP, Inc. v. Research in Motion, Ltd.*, 418 F.3d 1282, 1319 (Fed. Cir. 2005))); see also U.C.C. § 2-106(1) (AM. LAW INST. & UNIF. LAW COMM’N 2012) (“A ‘sale’ consists in the passing of title from the seller to the buyer for a price.”); *Sale*, BLACK’S LAW DICTIONARY (8th ed. 2004) (defining “sale” as “[t]he transfer of property or title for a price”).

211. See *The Meds. Co. v. Hospira, Inc.*, 791 F.3d 1368, 1370 (Fed. Cir. 2015) (“Each lot was marked with a commercial product code and a customer lot number, and was released to The Medicines Company for commercial and clinical packaging.”).

Commission.²¹² The patentee displayed the patented grapes before the critical date, but it did not allow visitors to take any plant material or view the plants in the field.²¹³ Although a grower obtained some unauthorized samples, he understood that he was expected to keep the grapes secret, grafted less than fifty vines of the patented grapes, and did not sell any before the critical date.²¹⁴ He gave a few to his cousin, but he told his cousin that they should “keep it to themselves.”²¹⁵ The cousin grew a couple hundred vines but did not sell them.²¹⁶ The grower also showed his marketer the grapes, but the marketer did not sell any until after the critical date, and hid their identity even afterward.²¹⁷

None of these events constituted an invalidating prior public use.²¹⁸ “The question in a case such as this one is thus whether the actions taken by the inventor (or, as in this case, a third party) create a reasonable belief as to the invention’s public availability.”²¹⁹ Here, the third party grower and his cousin “knew that they were not authorized to have the plants and that they needed to conceal their possession of the plants.”²²⁰ The marketer likewise understood the economic incentives for keeping the plants secret; it did not matter that there was no explicit confidentiality agreement given this “expectation of secrecy.”²²¹ Finally, the grower’s plants were not publicly accessible by virtue of being viewable from public roads because they were unlabeled, there were a very limited number relative to other unpatented varieties on the land, and no member of the public actually recognized what they were.²²²

E. Obviousness

The Federal Circuit’s 2015 obviousness jurisprudence showed that, although obviousness is ultimately a legal question, the lower court’s underlying findings of fact often dictate the outcome. Most of the Federal Circuit’s decisions do not warrant extended discussion because

212. 778 F.3d 1243, 1245 (Fed. Cir. 2015).

213. *Id.*

214. *Id.* at 1245–46.

215. *Id.* at 1246.

216. *Id.*

217. *Id.*

218. *Id.* at 1250.

219. *Id.* at 1247.

220. *Id.* at 1248.

221. *Id.*

222. *Id.* at 1249–50.

they dealt with case-specific disputes about underlying facts.²²³ But three decisions warrant further examination—one dealing with an important issue for pharmaceutical inventions, another dealing with the scope of “analogous art,” but a third showing that, occasionally, fact findings cannot stave off a finding of obviousness.

The first, *Allergan, Inc. v. Sandoz Inc.*,²²⁴ underscores the importance of the district court’s factual findings. The patents at issue covered an improved composition for treating glaucoma (and methods of using that composition) that significantly reduced the side effects from a prior art formulation while maintaining efficacy.²²⁵ The

223. See, e.g., *Spectrum Pharms., Inc. v. Sandoz Inc.*, 802 F.3d 1326, 1333–36 (Fed. Cir. 2015) (affirming an obviousness finding by rejecting the patentee’s argument of no motivation to combine and lack of enabling disclosures); *Shire LLC v. Amneal Pharms., LLC*, 802 F.3d 1301, 1306–09 (Fed. Cir. 2015) (affirming a grant of summary judgment for non-obviousness where the prior art did not disclose one of the claim elements because it included generic chemical formulas that covered hundreds of potential compounds and did not identify the claimed compound as part of a “finite and limited class”); *Ivera Med. Corp. v. Hospira, Inc.*, 801 F.3d 1336, 1344, 1346 (Fed. Cir. 2015) (reversing a grant of summary judgment for obviousness based on factual issues regarding motivation to combine and secondary indicia); *Dome Patent L.P. v. Lee*, 799 F.3d 1372, 1379–82 (Fed. Cir. 2015) (affirming an obviousness finding where the district court found evidence supporting findings of motivation to combine, weak commercial success, and no reference that taught away from the claimed invention); *Insite Vision Inc. v. Sandoz, Inc.*, 783 F.3d 853, 860 (Fed. Cir. 2015) (affirming non-obviousness and observing that “[w]hether a person of ordinary skill in the art would narrow the research focus to lead to the invention depends on the facts”); *Cadence Pharms. Inc. v. Exela PharmSci Inc.*, 780 F.3d 1364, 1373–76 (Fed. Cir. 2015) (affirming non-obviousness where the Patent and Trademark Office had already rejected the same argument, and finding that the district court did not clearly err in finding no motivation to combine or the presence of secondary indicia, even though the claims covered the patented product only by equivalents); *Senju Pharm. Co. v. Lupin Ltd.*, 780 F.3d 1337, 1342–53 (Fed. Cir. 2015) (affirming an obviousness finding where there was no clear error in the district court’s findings on the content of the prior art, the composition claims at issue contained no limitation on their function (rendering many arguments against motivation to combine irrelevant), no teaching away, and any increase in corneal permeability was not unexpected but was instead routine optimization); *MobileMedia Ideas LLC v. Apple Inc.*, 780 F.3d 1159, 1166–68 (Fed. Cir.) (affirming a non-obviousness judgment on one patent where substantial evidence supported a jury finding of no motivation to combine, but reversing a non-obviousness finding on another patent where the patentee’s testimony turned only on unclaimed limitations), *cert. denied*, 136 S. Ct. 270 (2015); *In re Imes*, 778 F.3d 1250, 1253–55 (Fed. Cir. 2015) (reversing obviousness and anticipation rejections where no substantial evidence supported the Board of Patent Appeals’ finding that a reference disclosed one of the claimed limitations).

224. 796 F.3d 1293 (Fed. Cir. 2015).

225. *Id.* at 1298–99.

claims required 0.01% of the active ingredient and 200 parts per million (ppm) of another excipient (BAK); some claims also included limitations on efficacy and side effects.²²⁶ The prior art disclosed broad ranges for both of these excipients (0.001%-1% active ingredient, and 0-1000 ppm BAK), along with a prior product that had 0.03% active and 50 ppm BAK.²²⁷

The issue, then, was whether the claims were obvious, given that they were directed to a formulation that fell within the broad prior art range. A prior decision, *Galderma Laboratories, L.P. v. Tolmar, Inc.*,²²⁸ had adopted a strict legal test, observing that, in such circumstances, the issue is whether there is a motivation to select the claimed composition from the range, and that “where there is a range disclosed in the prior art, and the claimed invention falls within that range, the burden of production falls upon the patentee to come forward with evidence that (1) the prior art taught away from the claimed invention; (2) there were new and unexpected results relative to the prior art; or (3) there are other pertinent secondary considerations.”²²⁹ *Galderma* invalidated the claims there, reversing a non-obviousness finding, and took a cramped view of teaching away and unexpected results.²³⁰

The *Allergan* court, however, determined that *Galderma* did not compel an obviousness finding.²³¹ For one thing, “the prior art ranges [were] broader than the range in *Galderma*, and the record show[ed] that the claimed amounts of the two different ingredients could and did materially and unpredictably alter the property of the claimed formulation.”²³² *Allergan* even hinted that the prior art ranges might be so broad “that they do not teach any specific amounts or combinations,” and thus did not shift the burden of production to the patentee to come forward with teaching away, unexpected results, or secondary indicia, but it did not reach the issue because the patentee had met its burden on those issues in any event.²³³

Allergan discerned no clear error in the district court’s finding that the prior art taught away from using 200 ppm BAK given potential

226. *Id.* at 1300.

227. *Id.* at 1304.

228. 737 F.3d 731 (Fed. Cir. 2013), *cert. denied*, 134 S. Ct. 2740 (2014).

229. *Id.* at 737–38.

230. *Id.* at 738–39, 741.

231. *Allergan*, 796 F.3d at 1305.

232. *Id.*

233. *Id.*

safety issues with so large an amount.²³⁴ The defendants' expert had described BAK as "from Satan" and a "natural-born killer," and prior art associated it with many eye disorders, thus discouraging the skilled artisan from using a higher concentration than was necessary; the prior art suggested that 50 ppm was adequate for this drug, so a skilled artisan would be discouraged from using more.²³⁵ Although a few different drugs had safely used 200 ppm BAK, the district court correctly found that these drugs formed a complex with BAK, resulting in less "free" BAK to damage the eye, and found that there were indeed some problems associated with these formulations.²³⁶ In addition, the district court did not clearly err in finding that increasing the amount of BAK might actually decrease penetration of the active ingredient into the eye, the opposite result that was needed to achieve the inventors' goal.²³⁷

Allergan also determined that unexpected results demonstrated non-obviousness, making an important legal point in the process.²³⁸ Prior decisions had distinguished between an "unexpected difference in degree" (e.g., a percentage change in a known property) and an "unexpected difference in kind" (e.g., an entirely new property), finding only the latter probative of non-obviousness.²³⁹ Using that framework, *Galderma* had dismissed percentage changes in side effects and efficacy as irrelevant differences in degree.²⁴⁰ However, *Allergan* found two unexpected differences in kind—(1) that the inventors demonstrated BAK would have the "opposite" impact on corneal permeability from what was expected, and (2) that the claimed formulation's reduction of side effects was "an unexpected difference in kind, *viz.*, the difference between an effective and safe drug and one with significant side effects that caused many patients to discontinue treatment."²⁴¹ The second conclusion is particularly notable because it dispels any suggestion that *Galderma* was erecting a per se rule against considering any improvement in a known parameter.

234. *Id.*

235. *Id.*

236. *Id.* at 1305–06.

237. *Id.* at 1306.

238. *Id.* at 1306–07.

239. *Bristol-Myers Squibb Co. v. Teva Pharm. USA, Inc.*, 752 F.3d 967, 977 (Fed. Cir. 2014), *cert. denied*, 135 S. Ct. 2050 (2015); *Galderma Labs., L.P. v. Tolmar, Inc.*, 737 F.3d 731, 739 (Fed. Cir. 2013), *cert. denied*, 134 S. Ct. 2740 (2014).

240. *Galderma*, 737 F.3d at 739.

241. *Allergan*, 796 F.3d at 1307.

Allergan made another important legal point on unexpected results—they cannot be dismissed as “merely the inherent properties of an otherwise obvious formulation.”²⁴² Here, the prior art did not disclose the claimed formulation, taught away from it, and gave the skilled artisan no motivation to select it. As a result, “[t]he unexpected properties of the claimed formulation, even if inherent in that formulation, differ in kind from the prior art, thereby supporting a conclusion of nonobviousness.”²⁴³ This was different from prior cases, where claims were invalid because they merely recited an unknown property of an otherwise obvious formulation.²⁴⁴ Rather, “[h]ere, the previously *unknown* and *unexpected* properties of a new and nonobvious formulation constitute additional, objective evidence of nonobviousness.”²⁴⁵

The second decision of interest, *Circuit Check, Inc. v. QXQ Inc.*,²⁴⁶ reversed a judgment as a matter of law (JMOL) of obviousness (reinstating the jury’s non-obviousness finding), where the jury reasonably found that a key piece of prior art was not “analogous” to the claimed invention.²⁴⁷ The claims covered an interface plate used to test a circuit board that included alignment holes marked in a particular way.²⁴⁸ The dispute was whether prior art marking techniques for rock carvings, engraved signage, and machining were analogous.²⁴⁹ Substantial evidence supported the jury’s finding that it was not.²⁵⁰ “Prior art is analogous if it is from the same field of endeavor or if it is reasonably pertinent to the particular problem the inventor is trying to solve.”²⁵¹ Here, the prior art was from a different field, and the jury heard testimony that it was not pertinent to the problem to be solved.²⁵² That was sufficient to support the verdict—the issue was not just whether a skilled artisan would have known about the art, but whether he actually would have looked to it to solve the problem at hand:

242. *Id.*

243. *Id.*

244. *Id.* (citing *In re Kao*, 639 F.3d 1057, 1070 (Fed. Cir. 2011); *Santarus, Inc. v. Par Pharm., Inc.*, 694 F.3d 1344, 1354 (Fed. Cir. 2012)).

245. *Id.*

246. 795 F.3d 1331 (Fed. Cir. 2015).

247. *Id.* at 1337.

248. *Id.* at 1333.

249. *Id.*

250. *Id.* at 1335.

251. *Id.*

252. *Id.*

Just because keying a car, for example, is within the common knowledge of humankind does not mean that keying a car is analogous art. An alleged infringer should not be able to transform all systems and methods within the common knowledge into analogous prior art simply by stating that anyone would have known of such a system or method. The question is not whether simple concepts such as rock carvings, engraved signage, or Prussian Blue dye are within the knowledge of lay people or even within the knowledge of a person of ordinary skill in the art. Rather, the question is whether an inventor would look to this particular art to solve the particular problem at hand. Here, Circuit Check put forward evidence that an inventor would not have considered the disputed prior art when trying to improve marking. It is not hard to arrive at that conclusion.²⁵³

The court thus reinstated the jury's non-obviousness finding.

A third case, though, shows that when a simple mechanical invention is involved and the relevant facts are not disputed, the Federal Circuit is not shy about invalidating the claims as a matter of law. *ABT Systems, LLC v. Emerson Electric Co.*²⁵⁴ reversed a jury finding of non-obviousness by applying an approach similar to the Supreme Court's *KSR International Co. v. Teleflex Inc.*²⁵⁵ decision.²⁵⁶ The claims were to a central air conditioner that ran a fan periodically after the preselected cooling cycle, and included other limitations.²⁵⁷ The prior art included "single-shot" devices (where the fan ran only during the cooling cycle) and "periodic" devices, and, when combined, it had all the elements.²⁵⁸ The main dispute was whether a skilled artisan would have combined the "single-shot" prior art with the "periodic" prior art.²⁵⁹ The Federal Circuit found a motivation to do so based on the "nature of the problem to be solved" by both the prior art and the claimed invention—avoiding air stagnation during periods when the heating or cooling system was not running.²⁶⁰ None of the secondary indicia changed this result. There was no evidence of commercial success linked to the invention, because the patentee did not submit market share data or advertisements

253. *Id.* at 1335–36.

254. 797 F.3d 1350 (Fed. Cir. 2015).

255. 550 U.S. 398 (2007).

256. *ABT Sys.*, 797 F.3d at 1362.

257. *Id.* at 1353.

258. *Id.* at 1358.

259. *Id.*

260. *Id.* at 1360–61.

stressing the claimed features.²⁶¹ Instead, it had evidence only of general press releases announcing its product.²⁶² Prior licenses were irrelevant because there was no evidence they were taken based on the merits of the invention.²⁶³ Finally, there was no long-felt need because the benefits the patentee stressed—which turned on the length of frequency of periodic fan operation—were not actually claim limitations.²⁶⁴

F. *Written Description and Enablement*

The Federal Circuit decided four written description cases, which clarified interesting legal principles, and, generally, emphasized the factual nature of the inquiry. Two of these cases also involved related enablement challenges; these issues will be discussed together where appropriate.

Allergan, Inc. v. Sandoz, Inc. addressed the validity of claims to a particular ophthalmic formulation (and method of using it to treat glaucoma) that required the formulation to result in substantially equivalent efficacy to the prior formulation, but with less of an undesired side effect.²⁶⁵ The specification identified the exact formulation claimed but did not include any clinical data or explicit discussion of the formulation's efficacy or safety, prompting the defendants to argue that this limitation was not adequately described.²⁶⁶ The Federal Circuit rejected that argument, noting that the defendants had argued—for obviousness purposes—that the claimed efficacy and safety necessarily resulted from that claimed formulation.²⁶⁷ “A claim that recites a property that is necessarily inherent in a formulation that is adequately described is not invalid as lacking written description merely because the property itself is not explicitly described.”²⁶⁸ The Federal Circuit noted, however, that a pre-filing clinical protocol that included data supporting the claims was irrelevant because it was outside the specification.²⁶⁹

Allergan also rejected a similar enablement challenge. One of the defendants argued that the claims could not be enabled if the

261. *Id.* at 1361.

262. *Id.*

263. *Id.* at 1361–62.

264. *Id.* at 1362.

265. 796 F.3d 1293, 1307–09 (Fed. Cir. 2015).

266. *Id.* at 1308.

267. *See id.* at 1308–09.

268. *Id.* at 1309.

269. *Id.*

specification lacked clinical data showing their efficacy, and further complained that the claims could not be both non-obvious and enabled.²⁷⁰ The Federal Circuit rejected these arguments. On the first point, “[a] patent does not need to guarantee that the invention works for a claim to be enabled,” and “efficacy data are generally not required in a patent application.”²⁷¹ Here, it was enough that the claims disclosed the exact claimed formulation, both in vitro and in vivo animal data that demonstrated the principle ultimately relied upon for the invention, and examples of similar compositions with increased efficacy and reduced side effects.²⁷² “In view of those disclosures, we agree with the district court that the skilled artisan would not have questioned the utility of the claimed formulation and would be able to make and use the claimed invention without undue experimentation.”²⁷³ Moreover, there was no conflict between non-obviousness and enablement because the former turned on the prior art disclosures, while the latter was based on the additional knowledge disclosed in the patent specification:

The obviousness inquiry turns on what the prior art would have taught a person of ordinary skill in the art and whether the claimed invention would have been obvious in view of the *prior art*. As indicated, the claims here would not have been obvious because, among other reasons, the prior art taught that BAK would not increase the permeability of bimatoprost. In contrast, the enablement inquiry turns on whether the skilled artisan, after reading the *specification*, would be able to make and use the claimed invention without undue experimentation, based on the ordinary skill in the art.²⁷⁴

The court thus upheld the claims’ validity.

*Inphi Corp. v. Netlist, Inc.*²⁷⁵ corrected a misunderstanding about what is required to show adequate written description of a “negative” claim limitation.²⁷⁶ An earlier decision in *Santarus, Inc. v. Par Pharmaceutical, Inc.*²⁷⁷ observed that “[n]egative claim limitations are adequately supported when the specification describes a reason to

270. *Id.* at 1310.

271. *Id.* (quoting *Alcon Research Ltd. v. Barr Labs., Inc.*, 745 F.3d 1180, 1189 (Fed. Cir. 2014)).

272. *See id.*

273. *Id.*

274. *Id.*

275. 805 F.3d 1350 (Fed. Cir. 2015).

276. *Id.* at 1357.

277. 694 F.3d 1344 (Fed. Cir. 2012) (per curiam).

exclude the relevant limitation.”²⁷⁸ The parties in *Inphi* erroneously read *Santarus* to stand for the inverse proposition as well, i.e., that a negative limitation is not supported when the specification does not give such a reason.²⁷⁹ The *Inphi* court rejected this argument.²⁸⁰ Instead, it was sufficient for the specification to describe features in the alternative, and, here, the patent mentioned and distinguished between the various signal types, thus supporting claims that explicitly excluded some of those signal types.²⁸¹

*Cubist Pharmaceuticals, Inc. v. Hospira, Inc.*²⁸² affirmed a finding of adequate written description after a bench trial, despite a mistake in the specification about the structure of the claimed compound.²⁸³ “It was enough that the specification disclosed relevant identifying characteristics that distinguished daptomycin [the claimed compound] from other compounds and thus showed that the inventors had possession of daptomycin, even though they may not have had an accurate picture of the entire chemical structure of that compound.”²⁸⁴ The Federal Circuit also found it significant that the claims were narrow and covered exactly what the inventors made; in doing so, the court distinguished a prior case where the inventors were unclear on the chemical structure but had broad genus claims.²⁸⁵

Finally, *Vasudevan Software, Inc. v. MicroStrategy, Inc.*²⁸⁶ reversed a summary judgment of no written description, concluding that the patentee’s expert offered sufficient, non-conclusory testimony to go to a jury.²⁸⁷ “The fact that these portions of the specification do not speak *in haec verba* of accessing ‘disparate databases’ does not eliminate as a genuine issue of material fact the existence of at least

278. *Id.* at 1351.

279. *Inphi*, 805 F.3d at 1355.

280. *Id.* at 1356 (“The *Santarus* court found that the patent-at-issue’s express recitation of (dis)advantages was sufficient to provide a reason to exclude the claim limitation at issue. That court did not hold, however, that such recitations were required to satisfy the written description requirements of § 112, paragraph 1 for negative claim limitations. Nor do we see any reason to now articulate a new and heightened standard for negative claim limitations.”).

281. *Id.* at 1357.

282. 805 F.3d 1112 (Fed. Cir. 2015).

283. *Id.* at 1118, 1121–22. The Federal Circuit also rejected the arguments that (1) a certificate of correction fixing some drawings in the specification and claims was not of “minor character” and thus invalid and (2) the corrected claims violated the “recapture” rule. *Id.* at 1117–18, 1121–22.

284. *Id.* at 1120.

285. *Id.*

286. 782 F.3d 671 (Fed. Cir. 2015).

287. *Id.* at 682–83.

some discussion, and, therefore, possession, of the accessing of disparate databases, as claimed.”²⁸⁸ Inventor admissions about what the specification did not disclose were irrelevant because the claims did not require what was supposedly lacking from the specification.²⁸⁹

Vasudevan also reversed a summary judgment of no enablement, and, as with written description, found that the patentee’s expert raised sufficient disputes about the underlying facts.²⁹⁰ The panel also noted that “the effort it took the inventor to reduce the invention to practice does not conclusively show a lack of enablement” because patents only have to enable what is claimed, not necessarily everything that is required for a commercial product, which is what the inventor was making in this case.²⁹¹

G. Indefiniteness

The Federal Circuit continued to grapple with several indefiniteness issues after the Supreme Court’s decisions in *Nautilus, Inc. v. Biosig Instruments, Inc.* and *Teva Pharmaceuticals USA, Inc. v. Sandoz, Inc.* One interesting theme is that the Federal Circuit maintained its original result in both cases, suggesting that the Supreme Court’s reframing of the indefiniteness standard has had little effect on the results. Another interesting trend is that most of the cases reversed findings of indefiniteness, treating the skilled artisan as someone who could readily figure out what the claims meant.²⁹²

For example, the *Nautilus* panel maintained its decision that a claim to a heart rate monitor requiring a “spaced relationship” between two electrodes was not indefinite.²⁹³ The panel explained that the Supreme Court had held the prior “insolubly ambiguous” standard “too imprecise,” and to “now steer by the bright star of ‘reasonable certainty,’ rather than the unreliable compass of ‘insoluble ambiguity.’”²⁹⁴ The panel quoted with approval a district court opinion in which Judge William C. Bryson, sitting by designation, had remarked that the Supreme Court’s decision “does not render all of the prior Federal Circuit and district court cases

288. *Id.*

289. *Id.* at 683.

290. *Id.* at 684–85.

291. *Id.* at 684.

292. This sub-section will focus on the Federal Circuit’s decision in *Nautilus*, as its decision in *Teva* has been discussed in detail above.

293. *Biosig Instruments, Inc. v. Nautilus, Inc.*, 783 F.3d 1374, 1384 (Fed. Cir.), *cert. denied*, 136 S. Ct. 569 (2015).

294. *Id.* at 1379.

inapplicable.”²⁹⁵ The panel then confined its review to the intrinsic evidence, which permitted it to review the issue *de novo* and reverse the district court’s judgment of indefiniteness.²⁹⁶ It then block quoted the portions of its prior opinion that found adequate guidance in the specification and prosecution history and again found the term definite.²⁹⁷

*Eidos Display, LLC v. AU Optronics Corp.*²⁹⁸ reversed another summary judgment of indefiniteness, this one involving a patent to a manufacturing process for LCDs with circuitry in which there was “a contact hole for source wiring and gate wiring connection terminals.”²⁹⁹ The district court thought the term indefinite because it was unclear whether this phrase required one shared hole for both connection terminals, or two separate holes, one for each connection terminal.³⁰⁰ But the Federal Circuit determined that a skilled artisan would understand that phrase to plainly require separate holes because that was the known industry practice (and this part of the claim was not the point of novelty), the specification uniformly taught separate holes, and the priority application and original claims suggested there were separate holes.³⁰¹ The Federal Circuit capped its analysis with a clever analogy: “[A] person familiar with cars, when reading the sentence ‘I am going to create an electric car for the United States and United Kingdom,’ would likely expect different electric cars to be created, one set with the steering wheel located on the left for driving in the United States, and another set with the steering wheel on the right for driving in the United Kingdom.”³⁰² So claims must be read in the context of the skilled artisan’s knowledge, and there is no indefiniteness problem if the claim language would be clear based on what the skilled artisan knows.

Apple Inc. v. Samsung Electronics Co.,³⁰³ sustained a finding that the term “substantially centered” was not indefinite where the patentee’s expert explained that the patent provided sufficient guidance to

295. *Id.* at 1381 (quoting *Freeny v. Apple Inc.*, Case No. 2:13-CV-00361-WCB, 2014 WL 4294505, at *5 (E.D. Tex. Aug. 28, 2014)).

296. *Id.* at 1382–84.

297. *See id.*

298. 779 F.3d 1360 (Fed. Cir.), *cert. denied*, 136 S. Ct. 502 (2015).

299. *Id.* at 1368.

300. *Id.* at 1364.

301. *Id.* at 1368.

302. *Id.* at 1365.

303. 786 F.3d 983 (Fed. Cir. 2015), *cert. granted in part*, 136 S. Ct. 1453 (2016).

understand the term and identified particular parts of the specification that supported his view.³⁰⁴

*Ethicon Endo-Surgery, Inc. v. Covidien, Inc.*³⁰⁵ reversed yet another summary judgment of indefiniteness, this one on a claim to surgical shears with a means for limiting the “clamping pressure” within certain parameters.³⁰⁶ The district court had invalidated the claims because it thought there was no specified method or location for measuring that pressure.³⁰⁷ But, after reviewing the specification’s description of an embodiment in which the pressure was measured, along with the patentee’s un rebutted testimony about the physics and mathematics involved in the pressure measurements here, the Federal Circuit concluded that the pressure should plainly be measured at the midpoint of the clamped surface area, which, for the shears here, was at the midpoint of both the tissue pad and the clamping arm.³⁰⁸ It did not matter that the specification did not describe this measuring method verbatim: “If such an understanding of how to measure the claimed average pressures was within the scope of knowledge possessed by one of ordinary skill in the art, there is no requirement for the specification to identify a particular measurement technique.”³⁰⁹ This was not a case like *Honeywell International, Inc. v. International Trade Commission*,³¹⁰ which invalidated claims where there were multiple ways to prepare a sample that yielded different results when measuring the claimed parameter, because the specification in *Ethicon* included sufficient information to guide the skilled artisan as to what measurement to use, while in *Honeywell*, the key information about the correct measurement method was unpublished and not known to skilled artisans.³¹¹

But just when it seems as though *Nautilus* changed little, another case, *Dow Chemical Co. v. Nova Chemicals Corp.*³¹² shows that it can, at least sometimes, make a difference. The liability portion of the case had previously been appealed to the Federal Circuit, which had affirmed a finding of no indefiniteness, and the matter was now back

304. *Id.* at 1002–03.

305. 796 F.3d 1312 (Fed. Cir. 2015).

306. *Id.* at 1316–17, 1322.

307. *Id.* at 1316–17.

308. *Id.* at 1318–19.

309. *Id.* at 1319.

310. 341 F.3d 1332 (Fed. Cir. 2003).

311. *Id.* at 1341; *Ethicon*, 796 F.3d at 1331–32.

312. 803 F.3d 620 (Fed. Cir. 2015), *reh’g denied per curiam*, 809 F.3d 1223 (Fed. Cir. 2015), *petition for cert. filed*, 84 U.S.L.W. 3530 (U.S. Mar. 16, 2016) (No. 15-1160).

after a second trial on damages.³¹³ *Nautilus* was decided during the intervening period, however, allowing the defendant to now argue that the claims were indefinite under the new standard.³¹⁴ The panel first held, as a procedural matter, that issue preclusion and the law of the case doctrine did not bar revisiting the prior decision, given the changed law.³¹⁵ The panel first held “there can be no serious question that *Nautilus* changed the law of indefiniteness,” that this “was indeed [its] very purpose,” and, as it went on to explain, that the new test changed the result here.³¹⁶

The patents covered plastic compositions with improved physical properties that required “a slope of strain hardening coefficient greater than or equal to 1.3” and provided an equation in the specification for calculating that slope.³¹⁷ There were multiple ways to measure the slope, and they yielded different results, at least one of which could impact whether the claims were infringed.³¹⁸ In addition, the patentee’s expert presented no evidence that his proposed test (which would have produced the different result) is what a skilled artisan would have picked, or would even have been known to a skilled artisan.³¹⁹

So the Federal Circuit identified the issue as “whether the existence of multiple methods leading to different results without guidance in the patent or the prosecution history as to which method should be used renders the claims indefinite.”³²⁰ *Nautilus* changed the answer to this question. “Before *Nautilus*, a claim was not indefinite if someone skilled in the art could arrive at a method and practice that method.”³²¹ But now this standard was insufficient because “the required guidance is not provided by the claims, specification, and prosecution history.”³²² In other words, the intrinsic record now must resolve any ambiguity, and it failed to do so here. It would seem, though, that if the patentee had presented expert evidence that skilled artisans would have used a particular

313. *Id.* at 623.

314. *Id.* at 625.

315. *Id.* at 628–31.

316. *Id.* at 630–31.

317. *Id.* at 631.

318. *Id.* at 633–34.

319. *Id.*

320. *Id.* at 634.

321. *Id.*

322. *Id.*

method, then this should also have been enough, for the patent need not repeat what was already known in the art.

The rehearing petition in *Dow*, which accused the panel of changing the law of indefiniteness, provoked several opinions.³²³ Judge Moore, joined by Judges Newman, Kathleen O'Malley, Richard Taranto, and Raymond Chen, wrote to stress that the panel had not changed the fact that indefiniteness must be proven by clear and convincing evidence, that it involves underlying factual findings (after *Teva* required deference on appeal), and that extrinsic evidence may be used to show the skilled artisan's knowledge.³²⁴ The defendant had tried to defend the panel's ruling on the ground that extrinsic evidence was irrelevant; but, these judges flatly rejected that view: "*Dow* does not and cannot stand for the proposition that extrinsic evidence cannot be used to establish the state of knowledge of the skilled artisan, for example, whether one of skill in the art would know which measurement technique to employ to determine the maximum slope of a curve."³²⁵ They added that

[t]he burden of proving indefiniteness includes proving not only that multiple measurement techniques exist, but that one of skill in the art would not know how to choose among them. This knowledge of the skilled artisan is part of the proof necessary for indefiniteness and the burden of proving it is on the challenger of validity.³²⁶

The same judges (except Judge Chen) also noted that they did not necessarily agree with the panel's result; they just thought that any problems were too case-specific to warrant en banc review.³²⁷ They were concerned that the panel decided the case on a ground never argued by the defendant, that it delved into a very factual issue, and that it did not appear to give sufficient deference to the jury's implicit factual findings.³²⁸ But, as long as the panel opinion was not seen as changing the law, it was appropriate to let its result stand.

The original panel members—Chief Judge Prost and Judges Dyk and Wallach—wrote briefly to note their agreement with Judge Moore's statement of the law.³²⁹ In particular, they agreed with the

323. *Dow Chem. Co. v. Nova Chems. Corp.*, 809 F.3d 1223 (Fed. Cir. 2015) (per curiam).

324. *Id.* at 1225 (Moore, J., concurring) ("It would be incorrect to argue that the *Dow* decision changed this or that the intrinsic record alone must disclose which measurement method to use.").

325. *Id.* at 1225.

326. *Id.* at 1227.

327. *Id.*

328. *Id.* at 1227–28.

329. *Id.* at 1224 (Prost, C.J., Dyk, J., Wallach, J., concurring).

point about extrinsic evidence, removing an ambiguity in the panel opinion: “[W]e agree that if a skilled person would choose an established method of measurement, that may be sufficient to defeat a claim of indefiniteness, even if that method is not set forth *in haec verba* in the patent itself.”³³⁰

Judge O’Malley, joined by Judge Reyna, agreed with everyone else’s view of the law of indefiniteness but dissented because she thought the panel should not have addressed the issue at all.³³¹ In her view, the decision in the prior appeal conclusively resolved indefiniteness and resulted in a final judgment.³³² She thought that *Robert Bosch, LLC v. Pylon Manufacturing Corp.*³³³ required this result because it held that a decision on liability was “final except for an accounting” and immediately appealable under 28 U.S.C. § 1292(c)(2).³³⁴ The further proceedings on damages, in her view, were entirely separate because the district court, having certified just the liability phase for appeal under Federal Rule of Civil Procedure 54(b), always retained jurisdiction over that issue.³³⁵ When the prior panel affirmed the liability judgment, that part of the case was done, and there was no “remand” of it back to the district court or other action that might keep it alive. Given that there was a final judgment on liability, the majority’s discussions of issue preclusion and law of the case were red herrings.³³⁶ She also objected to the panel deciding the case on a basis not raised by the appellant.³³⁷

A pair of other decisions invalidated claims as definite where they contained claim terms that were subject to § 112(6) and involved software, but did not include sufficient corresponding structure because there was no algorithm in the specification. In *Eon Corp. IP Holdings LLC v. AT&T Mobility LLC*,³³⁸ the patentee admitted that its patent did not have an algorithm but tried to invoke the exception that no algorithm is needed where no “special programming” is involved.³³⁹ The Federal Circuit rejected that argument, explaining

330. *Id.*

331. *Id.* at 1228 (O’Malley, J., dissenting).

332. *Id.* (“[T]here was no appeal before us that would justify this panel’s decision to reach those issues.”).

333. 719 F.3d 1305 (Fed. Cir. 2013) (en banc).

334. *Id.* at 1319.

335. *Dow Chem. Co.*, 809 F.3d at 1230 (O’Malley, J., dissenting).

336. *Id.* at 1231–32.

337. *Id.* at 1230 (citing FED. R. APP. P. 4(a)(1)(B)).

338. 785 F.3d 616 (Fed. Cir. 2015).

339. *See id.* at 621 (citing *In re Katz Interactive Call Processing Patent Litig.*, 639 F.3d 1303, 1316 (Fed. Cir. 2011)).

that *any* programming beyond that coextensive with a microprocessor or general purpose computer counts as “special programming,” regardless of its relative simplicity.³⁴⁰ Here, it was undisputed that some additional programming was needed, and the absence of an algorithm thus rendered the claim indefinite. The skilled artisan’s knowledge could not be used to fill the gap because, again, the specification disclosed no algorithm at all.

Likewise, the Federal Circuit in *Media Rights Technologies, Inc. v. Capital One Financial Corp.*³⁴¹ affirmed an indefiniteness finding involving the term “compliance mechanism” because there was no disclosed algorithm.³⁴² As an initial matter, the panel held that § 112(6) applied, despite the term not invoking the word “means.”³⁴³ The specification lacked a structural description of this element (referring only to its functions), and the word “mechanism” was devoid of structure.³⁴⁴ The Federal Circuit distinguished a prior case finding another non-means term not subject to § 112(6) based on the fact that it applied the “heavy presumption” that has since been overruled in *Lighting Ballast*.³⁴⁵ Turning to indefiniteness, the court then held there was unrebutted testimony that the specification’s only disclosed software code for two of the compliance mechanism’s functions returned only error messages.³⁴⁶ As a result, because the algorithm certainly could not carry out the functions, the patent was indefinite.³⁴⁷

H. Broadening Reissue

*ArcelorMittal France v. AK Steel Corp.*³⁴⁸ affirmed a judgment that two reissue claims were impermissibly broadened but reversed on another claim.³⁴⁹ The patentee had obtained the reissue while a prior appeal

340. *Id.* at 621–22 (describing the *Katz* exception as “narrow”).

341. 800 F.3d 1366 (Fed. Cir. 2015), *cert. denied*, 136 S. Ct. 1173 (2016).

342. *Id.* at 1368 (affirming that the term “compliance mechanism . . . is a means-plus-function term that lacks sufficient structure”).

343. *Id.* at 1371–72.

344. *Id.* at 1369.

345. *Id.* at 1373 (distinguishing *Inventio AG v. ThyssenKrupp Elevator Ams. Corp.*, 649 F.3d 1350 (Fed. Cir. 2011)).

346. *Id.* at 1375.

347. *Id.* (“[T]he specification fails to adequately disclose the structure to perform all four of its functions.”).

348. 786 F.3d 885 (Fed. Cir. 2015), *appeal filed*, 2015 WL 7903739 (Fed. Cir. Dec. 23, 2015) (No. 16-1357).

349. *Id.* at 887.

from this litigation was pending.³⁵⁰ The original independent claim required “a very high mechanical resistance,” and the prior opinion construed this as limited to “greater than 1500 MPa.”³⁵¹ The patentee tried to be clever about expanding the scope by leaving the independent claim alone, yet adding a dependent claim that required mechanical resistance “in excess of 1000 MPa.”³⁵² As a result, both reissue claims were effectively broader (the independent one was broader based on claim differentiation and 35 U.S.C. § 112(d)). The Federal Circuit rejected the argument that the proper construction of the reissue’s dependent claim was not controlled by its prior opinion. In particular, the addition of the new dependent claim was not “new evidence” that could permit revisiting the interpretation of original claim one under either law of the case or the mandate rule.³⁵³

The district court erred, however, in holding that because some claims of the reissue patent had been impermissibly broadened, all reissue claims were invalid.³⁵⁴ Invalidity due to impermissible broadening is evaluated claim-by-claim.³⁵⁵ There was no broadening of claims 24 and 25 because these claims, added during reissue, had the same scope as the original claim one.³⁵⁶

I. Obviousness-Type Double-Patenting

*G.D. Searle LLC v. Lupin Pharmaceuticals, Inc.*³⁵⁷ affirmed a judgment invalidating claims for obviousness-type double patenting because it concluded the safe harbor provision, 35 U.S.C. § 121,³⁵⁸ did not apply.³⁵⁹ The applicant received a restriction requirement for claims to compositions, compounds, and methods of use.³⁶⁰ It filed a

350. See *id.* at 887–88 (summarizing that ArcelorMittal amended its original pleadings to substitute for the patent it prosecuted pending litigation as well as filed additional patent infringement claims based on the newly prosecuted patent).

351. See *id.* at 887.

352. *Id.*

353. See *id.* at 889 (“Permitting a reissue patent to disturb a previous claim construction of the original claim would turn the validity analysis . . . on its head.”).

354. *Id.* at 890.

355. See *id.* (basing the court’s requirement to analyze each case uniquely on “statute and our precedent”).

356. *Id.*

357. 790 F.3d 1349 (Fed. Cir. 2015).

358. 35 U.S.C. § 121 (2012).

359. 790 F.3d at 1351.

360. See *id.* at 1352 (requiring Pfizer to select only one of the three classes of claims in which Pfizer chose to prosecute only the compound claims initially).

divisional application and prosecuted composition claims.³⁶¹ It later filed a continuation-in-part (CIP) for the application, chose to prosecute the methods-of-use claims, and obtained those claims.³⁶² But in *Pfizer, Inc. v. Teva Pharmaceuticals, Inc.*,³⁶³ the Federal Circuit invalidated the CIP claims based on the earlier composition claims because, unlike patents issued on a divisional application, a CIP's claims are not protected from double-patenting by § 121's safe harbor.³⁶⁴ The patentee responded by obtaining a reissue patent that re-designated the CIP application as a divisional, deleted the new matter, and narrowed the claims so they did not cover any new matter.³⁶⁵ It asserted the reissue in this case.

The reissue patent was invalid because it was still outside § 121's safe harbor, which protects only claims in an original or divisional application.³⁶⁶ The reissue was neither—it stemmed from an application (the original CIP) that contained new matter and thus could not be a divisional application.³⁶⁷ Deleting the new matter from the reissue did not change the character of the CIP through which it claimed priority.³⁶⁸ Fairness to the public did not permit the patentee to use reissue to retroactively re-designate the CIP as a divisional.³⁶⁹ Moreover, the CIP descended from a PCT that also had new matter and was not a divisional of the initial application.³⁷⁰

The safe harbor was also inapplicable for another independent reason. The reissue claims and the prior art composition claims were not “derived from the same restriction requirement.”³⁷¹ Instead, the reissue's method claims stemmed from a separate restriction requirement made during prosecution of the CIP.³⁷² “When separate restriction requirements are imposed on separate applications and the record does not show that any of the various restriction

361. *Id.*

362. *Id.*

363. 518 F.3d 1353 (Fed. Cir. 2008).

364. *See id.* at 1363.

365. *See id.* at 1358.

366. *Id.* at 1362 (“The difference between divisional [and continuation-in-part (“CIP”) applications], moreover, was well known at the time that Congress enacted the 1952 Patent Act.”).

367. *Id.*

368. *See id.*

369. *See id.* at 1361 (“The inequity of this practice was well known by 1952.”).

370. *See G.D. Searle LLC v. Lupin Pharm., Inc.*, 790 F.3d 1349, 1355 (Fed. Cir. 2015).

371. *Id.* at 1356 (quoting *Pfizer*, 518 F.3d at 1360).

372. *See id.* at 1355.

requirements carried forward from one application to the next, the earlier restriction requirement cannot be viewed as having continued in effect with respect to the later-filed application.”³⁷³ Here, nothing suggested that the restriction requirement in the CIP was “carried forward” from the restriction in the initial application.

III. INFRINGEMENT

A. *Induced Infringement*

1. *Intent to induce*

This year’s main case on inducement is the Supreme Court’s decision in *Commil USA, Inc. v. Cisco Systems, Inc.*,³⁷⁴ which held that a good faith belief in non-infringement is a defense to inducement but a belief in invalidity is not.³⁷⁵ The Court thought its first holding was dictated by *Global-Tech Appliances, Inc. v. SEB S.A.*,³⁷⁶ which had addressed only whether a defendant must have actual notice of a patent to be liable for inducement, but had used looser language and required knowledge that “the induced acts constitute patent infringement.”³⁷⁷ The Court gave no pragmatic reason for its conclusion—it simply cited *Global-Tech* and *Aro Manufacturing Co. v. Convertible Top Replacement Co.*,³⁷⁸ even though neither case addressed a situation where the defendant knew of the patent but thought the claims did not cover its products.³⁷⁹

Nevertheless, *Commil* held that a good faith belief in invalidity was different from a belief in non-infringement.³⁸⁰ Non-infringement and invalidity were distinct defenses under the Patent Act,³⁸¹ and there was no basis for conflating them. Moreover, allowing a good faith belief in invalidity to serve as a defense to inducement would undermine the presumption of validity. The maxim that an invalid patent cannot be infringed did not require a different result because “invalidity is not a defense to infringement, it is a defense to

373. *Id.* at 1356.

374. 135 S. Ct. 1920 (2015).

375. *Id.* at 1928 (“Were this Court to interpret [35 U.S.C.] § 271(b) as permitting a defense of belief in invalidity, it would conflate the issues of infringement and validity.”).

376. 131 S. Ct. 2060 (2011).

377. *Id.* at 2068.

378. 377 U.S. 476 (1964).

379. *See Commil*, 135 S. Ct. at 1927.

380. *Id.* at 1928 (“[I]nfringement and invalidity are separate matters under patent law.”).

381. 35 U.S.C. § 282(b)(1)–(2) (2012).

liability.”³⁸² Finally, pragmatic reasons counseled against creating a new defense, because it would complicate litigation, allow defendants an easy out from liability, and make it difficult for juries, who “would be put to the difficult task of separating the defendant’s belief regarding validity from the actual issue of validity.”³⁸³ Alleged infringers already have ample options for contesting validity, either in court or at the Patent Office. And, of course, mistake of law typically is not a defense. The Court thus vacated the Federal Circuit’s judgment, which had ordered a new trial over the defendant’s belief in validity.³⁸⁴

The Supreme Court’s decision is disappointing because it significantly weakens a patentee’s ability to enforce its patents where customers are the direct infringers. The same practical arguments against making a belief in invalidity a defense apply equally to a belief in non-infringement. Almost any defendant (even the worst copyist) can concoct at least one non-infringement defense, through claim construction or otherwise. Moreover, a mistake about whether the patent covers your product often implicates legal issues about claim construction just as much as a validity defense would. The only saving grace for plaintiffs might be that, just as the Supreme Court feared for validity, juries will likely conflate the actual question of infringement with the defendant’s belief, and thus be inclined to return a general verdict of inducement if they think the patent covers the product.

The Supreme Court’s approach will also raise vexing questions as courts try to probe a good faith belief in non-infringement. Can a defendant obtain summary judgment of no inducement simply by putting in an affidavit or deposition testimony from a corporate executive asserting that he believed the patent does not cover their product? What evidence can a plaintiff realistically collect to rebut such a statement? Most defendants are unlikely to keep non-privileged documents that admit to infringement. Is it enough for the plaintiff to simply argue that the jury can disbelieve the executive (and find no good faith), because its infringement case is so clear?

382. *Commil*, 135 S. Ct. at 1929.

383. *Id.* at 1929–30.

384. On remand, the Federal Circuit agreed with one of Cisco’s alternative non-infringement arguments and granted judgment as a matter of law (JMOL) of no direct infringement, thereby ending the case entirely (absent further Supreme Court review, which is unlikely on that case-specific question). *Commil USA, LLC v. Cisco Sys., Inc.*, 813 F.3d 994 (Fed. Cir. 2015). So, ironically, the defendant is now better off after having lost at the Supreme Court, and, had the Federal Circuit simply reached this alternative issue in its prior opinion, then the inducement issue would have been unnecessary to decide.

There are also tough questions about timing. Say a defendant learns of the patent in 2004 but does not develop a defense until it is sued and hires trial counsel in 2006. Is it liable for activity from 2004 to 2006, but not afterward? What if the defendant loses a claim construction ruling in 2008, which guts its non-infringement defense? Is it liable from 2004 to 2006 and after 2008, but not 2006 to 2008? What about the fact that a defendant still has the right to appeal that *Markman* ruling—if the defendant still thinks it is right, does the good faith belief extend even after a jury verdict of infringement and a Federal Circuit appeal, until the Supreme Court denies certiorari? And what about non-infringement defenses based on since-rejected *Markman* positions: does the jury get to hear about those, and the fact that the defendant still believes them in good faith and plans to appeal? There are no easy answers to these questions, but at least one Federal Circuit decision suggests that this may be where we are headed, because it analyzed inducement liability separately for different time periods.³⁸⁵ Further Federal Circuit guidance on these issues, however, will have to wait until later this year and beyond.

The Federal Circuit's only decision in this area was *Info-Hold, Inc. v. Muzak LLC*,³⁸⁶ in which it vacated a summary judgment of no inducement and identified disputed facts about whether the defendant was willfully blind to infringement.³⁸⁷ The plaintiff there had repeatedly contacted the defendant about the patent, and, during a conversation, the defendant inquired about the patent's functionality, admitted its system was at least somewhat similar, and agreed to follow-up.³⁸⁸ But the defendant then ignored the plaintiff's subsequent letters.³⁸⁹ As a result, there was a fact issue about whether the defendant "subjectively believed there was a high probability it infringed the '374 patent and took deliberate actions to avoid learning whether it actually did."³⁹⁰

385. See *Bose Corp. v. SDI Techs., Inc.*, 558 F. App'x 1012, 1023 (Fed. Cir. 2014) ("Several points in time deserve independent analysis to judge SDI's good-faith belief of invalidity.").

386. 783 F.3d 1365 (Fed. Cir. 2015) (en banc).

387. *Id.* at 1367, 1373.

388. *Id.* at 1368.

389. *Id.*

390. *Id.* at 1373.

2. *Affirmative acts*

Another notable inducement decision, *Takeda Pharmaceuticals U.S.A., Inc. v. West-Ward Pharmaceutical Corp.*,³⁹¹ related to a different element under § 271(b)—the requirement that a defendant engage in affirmative acts to encourage another's infringement.³⁹² Disputes over this element often arise in pharmaceutical cases because a method-of-treatment patent may cover the use of a drug only for a particular disease (or only in a particular way), yet the drug may have non-infringing uses for treating other diseases. Congress has developed a procedure through which a generic drug manufacturer can "carve out" the infringing use from its label and market the drug for only the non-infringing uses.³⁹³ The reality, though, is that pharmacists freely substitute the generic drug for the branded version for all uses, including the patented use.³⁹⁴ So, patentees have tried to stop this chicanery by suing for induced infringement and arguing that the defendant's sale of the product, coupled with a wink-and-a-nod that it can be used in an infringing manner, is enough for liability.³⁹⁵

Takeda took a hard line against that approach. The Federal Circuit held that a defendant must "encourage, recommend, or promote infringement," and that even a mere description of the infringing use is not enough.³⁹⁶ Applying this standard, the court found no inducement of a patent that covered using a drug to treat gout flares where the only potential affirmative act was the product label's statement that "[i]f you have a gout flare while taking [the drug], tell your healthcare provider."³⁹⁷ This did not amount to a direction to actually use the drug for gout, and "vague label language cannot be combined with speculation about how physicians may act to find

391. 785 F.3d 625 (Fed. Cir. 2015) (en banc).

392. See 35 U.S.C. § 271(b) (2012) ("Whoever actively induces infringement of a patent shall be liable as an infringer.").

393. See, e.g., *Caraco Pharm. Labs., Ltd. v. Novo Nordisk A/S*, 132 S. Ct. 1670, 1676–77 (2012) (explaining the statutory scheme); see also 21 U.S.C. § 355(b)(2)(A)–(B) (2012) (detailing the required contents of an application for permission to introduce a new drug into interstate commerce).

394. See *Takeda*, 785 F.3d at 633 (citing *Warner-Lambert Co. v. Apotex Corp.*, 316 F.3d 1348, 1364 (Fed. Cir. 2003)).

395. See *id.* at 630 (summarizing the claim that *Takeda* believed a physician's statements to a patient to take a generic drug to use for the same purpose as the patented drug constitutes inducement).

396. *Id.* at 631.

397. *Id.* at 630.

inducement.”³⁹⁸ The Federal Circuit did not reach the question of whether a showing that the label would “inevitably” lead physicians to prescribe the drug for gout might suffice because the evidence here could not support such an inference: “Speculation or even proof that some, or even many, doctors would prescribe [the drug] for acute flares is hardly evidence of inevitability.”³⁹⁹ In particular, the panel pointed to evidence of other non-infringing gout treatments.⁴⁰⁰

Judge Newman dissented because she read the majority as holding that “the provider of a known drug product, with knowledge that it is likely to be used in direct infringement, can never be liable for induced infringement” and thought the rule should be more closely tailored to the facts of each case.⁴⁰¹ She criticized the majority’s over-reliance on the drug’s product label: “The FDA label is not a vehicle of promotion of any use; it is a record of approved safety and efficacy of the product as used in accordance with the label.”⁴⁰² Instead, according to Judge Newman, the majority should have looked to additional evidence presented by Takeda that showed “the doctor is likely to prescribe the Takeda protocol, for that protocol is approved by the FDA and is known to physicians who treat gout.”⁴⁰³

Takeda will impact not only “skinny label” pharmaceutical litigation but also all types of inducement claims. Many software patents cover methods of using a particular feature that could only be directly infringed by the seller. Could a defendant avoid liability if its products simply “described” the infringing feature but did not “recommend, encourage, or promote” it? The decision could also prove problematic for patents on electronic components that are manufactured and sold abroad, but then incorporated into larger end-products bound for the United States. The patentee’s only practical remedy is to sue the components’ manufacturer for indirect infringement, but can that party avoid liability by arguing that it does not “recommend, encourage, or promote” U.S. importation of its products, even if knows that its products enter the United States and profits from them doing so? One would hope not, but defendants will surely make the argument.

398. *Id.* at 632.

399. *Id.* at 633.

400. *Id.* at 632.

401. *Id.* at 636 (Newman, J., dissenting) (determining that liability for induced infringement requires analysis of the “fact-specific circumstances”).

402. *Id.* at 637.

403. *Id.* at 638.

It seems like the legal analysis should take into account how the defendant positions itself to make money. In the latter scenario, U.S. importation expands the market for the defendant's component, so the defendant certainly wants its products to come into the United States. Likewise, a generic manufacturer might know that its product will be used in both infringing and non-infringing ways and reap significant revenue from the infringing use. Courts should be able to recognize this reality and prevent defendants from profiting from such behavior.

B. Joint Infringement

The Federal Circuit once again revisited *Akamai Technologies, Inc. v. Limelight Networks, Inc.*,⁴⁰⁴ resulting in a newly adopted en banc standard for joint infringement. We can dispense with the long history of this case, which involved a prior en banc decision,⁴⁰⁵ vacatur by the Supreme Court,⁴⁰⁶ and remand decision by the panel,⁴⁰⁷ and instead focus on what the en banc court did in 2015.

Joint infringement had previously required proof that one entity directed or controlled the performance of each step of a patented method through either a principal-agent relationship or a contractual arrangement.⁴⁰⁸ The en banc court expanded this test to include other, less formal situations:

In the past, we have held that an actor is liable for infringement under § 271(a) if it acts through an agent (applying traditional agency principles) or contracts with another to perform one or more steps of a claimed method. We conclude, on the facts of this case, that liability under § 271(a) can also be found when an alleged infringer conditions participation in an activity or receipt of a benefit upon performance of a step or steps of a patented method and establishes the manner or timing of that performance. In those instances, the third party's actions are attributed to the alleged infringer such that the alleged infringer becomes the single actor chargeable with direct infringement.⁴⁰⁹

404. 786 F.3d 899 (Fed. Cir.), *modified on reh'g en banc* by 797 F.3d 1020, 1022 (Fed. Cir. 2015) (en banc) (per curiam).

405. *Akamai Techs., Inc. v. Limelight Networks, Inc.*, 692 F.3d 1301 (Fed. Cir. 2012) (en banc) (per curiam).

406. *Limelight Networks, Inc. v. Akamai Techs., Inc.*, 134 S. Ct. 2111 (2014).

407. *Akamai Techs.*, 786 F.3d at 915.

408. *See, e.g., id.* at 910; *Muniauction, Inc. v. Thomson Corp.*, 532 F.3d 1318, 1329 (Fed. Cir. 2008); *BMC Res., Inc. v. Paymentech*, 498 F.3d 1373, 1378–79 (Fed. Cir. 2007), *overruled by* *Akamai Techs., Inc. v. Limelight Networks, Inc.*, 692 F.3d 1301 (Fed. Cir. 2012), *rev'd*, 134 S. Ct. 2111 (2014).

409. *Akamai Techs.*, 797 F.3d at 1023 (en banc) (citations omitted).

The court then reiterated that direction or control is a factual question, reviewed for substantial evidence when submitted to a jury.⁴¹⁰

Applying this new standard, the en banc court determined that substantial evidence supported the jury's finding of direction or control.⁴¹¹ The defendant, through contracts, conditioned customers' use of its computer network on their performance of some of the claimed method steps.⁴¹² Moreover, the defendant established the "manner and timing" of its customers' performance by providing them instructions and customer support such that "customers can only avail themselves of the service upon their performance of the method steps."⁴¹³

The en banc court also stressed that its standard was flexible and would apply whenever all the steps were attributable to a single act.⁴¹⁴ For example, another situation (previously flagged by the most recent panel decision) that could give rise to joint infringement is one "where the actors form a joint enterprise."⁴¹⁵ In that type of situation, any participant could be charged with the acts of the other, so it gives more flexibility, because the plaintiff could sue any participant for the conduct as a whole.⁴¹⁶ The court then articulated the following four elements for a joint enterprise, which it drew from the Restatement (Second) of Torts:

- (1) an agreement, express or implied, among the members of the group;
- (2) a common purpose to be carried out by the group;
- (3) a community of pecuniary interest in that purpose, among the members; and
- (4) an equal right to a voice in the direction of the enterprise, which gives an equal right of control.⁴¹⁷

The en banc court then reiterated that "[s]ection 271(a) is not limited solely to principal-agent relationships, contractual arrangements, and joint enterprise, as the vacated panel decision

410. *Id.*

411. *Id.* at 1022.

412. *Id.* at 1024–25.

413. *Id.* at 1025.

414. *Id.* at 1023.

415. *Id.* at 1022.

416. *Id.* at 1023.

417. *Id.* (quoting RESTATEMENT (SECOND) OF TORTS § 491 cmt. c (AM. LAW INST. 1988)).

held. Rather, to determine direct infringement, we consider whether all method steps can be attributed to a single entity.”⁴¹⁸

C. Doctrine of Equivalents

The Federal Circuit continued to breathe new life into the doctrine of equivalents this year by putting another stake in the heart of vitiation. The concept of vitiation arose from the Supreme Court’s “all elements” rule, with the idea being that the scope of equivalents cannot be extended so far that it would effectively read an element out of the claim; for example, a claim element requiring a “majority” could not be equivalent to an accused product with a “minority.”⁴¹⁹ But, in recent years, the Federal Circuit has stressed that vitiation is not a separate doctrine and is instead another way of saying that the accused product has an element substantially similar to what is claimed.⁴²⁰ This may at first seem a semantic quibble, but, by reframing the inquiry in this way, the Federal Circuit has transformed the issue back into a question of fact and away from being a question of law.

Two cases continued this trend in 2015. In *Cadence Pharmaceuticals, Inc. v. Exela Pharmsci Inc.*,⁴²¹ the patent required the step of “deoxygenation of the [aqueous] solution,” which was construed to require the active ingredient be dissolved before the deoxygenation occurred, because otherwise you would not yet have a solution.⁴²² The accused process, however, involved first deoxygenating the solvent, and only then adding the active ingredient to form a solution.⁴²³ The panel affirmed a finding of equivalency based on expert testimony that the order of the steps would have no impact on the solution’s final stability, which was the point of the patent. It rejected the defendant’s vitiation argument, been based on *Planet Bingo v. GameTech International, Inc.*,⁴²⁴ which had found that

418. *Id.* at 1023 (footnote omitted).

419. *Moore U.S.A., Inc. v. Standard Register Co.*, 229 F.3d 1091, 1105–07 (Fed. Cir. 2000) (“[I]t would defy logic to conclude that a minority—the very antithesis of a majority—could be insubstantially different from a claim limitation requiring a majority, and no reasonable juror could find otherwise.”).

420. *See, e.g., Ring & Pinion Serv. Inc. v. ARB Corp.*, 743 F.3d 831, 836 (Fed. Cir. 2014); *VirnetX, Inc. v. Cisco Sys., Inc.*, 767 F.3d 1308, 1323 (Fed. Cir. 2014); *Brilliant Instruments, Inc. v. GuideTech*, 707 F.3d 1342, 1347 (Fed. Cir. 2013); *Charles Mach. Works, Inc. v. Vermeer Mfg. Co.*, 723 F.3d 1376, 1380 (Fed. Cir. 2013); *Deere & Co. v. Bush Hog*, 703 F.3d 1349, 1356 (Fed. Cir. 2012).

421. 780 F.3d 1364 (Fed. Cir. 2015).

422. *Id.* at 1370–72.

423. *Id.* at 1370.

424. 472 F.3d 1338 (Fed. Cir. 2006).

determining a winning combination after the game started could not be equivalent to the claimed “predetermined winning combination.”⁴²⁵ In doing so, the panel reiterated that vitiation is not a separate doctrine and told parties to stop using conclusory labels like “opposite” or “antithesis” instead of relying on the specific facts:

“Vitiation” is not an exception or threshold determination that forecloses resort to the doctrine of equivalents, but is instead a legal conclusion of a lack of equivalence based on the evidence presented and the theory of equivalence asserted. . . . Characterizing an element of an accused product as the “antithesis” of a claimed element is also a conclusion that should not be used to overlook the factual analysis required to establish whether the differences between a claimed limitation and an accused structure or step are substantial *vel non*. The determination of equivalence depends not on labels like “vitiation” and “antithesis” but on the proper assessment of the language of the claimed limitation and the substantiality of whatever relevant differences may exist in the accused structure. . . . Since a reasonable trier of fact could (and, in fact, did) conclude that Exela’s process is insubstantially different from that recited in the claims, the argument that a claim limitation is vitiated by the district court’s application of the doctrine of equivalents is both incorrect and inapt.⁴²⁶

Likewise, *Warsaw Orthopedic, Inc. v. NuVasive, Inc.*⁴²⁷ affirmed a jury verdict that two enclosing prongs capable of lateral movement and pivoting was equivalent to three enclosing prongs, two of which were capable of lateral movement and pivoting, even though the claim specifically required that “each” prong move and pivot.⁴²⁸ Again, the panel stressed that “vitiation is not a separate argument from insubstantiality,” and pointed to testimony that the product functioned in a similar manner to what was claimed.⁴²⁹

These cases create further ambiguity in a difficult area of the law. The problem with vitiation has always been that, in some sense, any doctrine of equivalents case involves “reading out” a claim limitation—the only reason a patentee relies on equivalents is because the claim element is not literally present in the accused product. The doctrine of equivalents is always used to expand the

425. *Id.* at 1346–47.

426. *Cadence*, 780 F.3d at 1371–72.

427. 778 F.3d 1365 (Fed. Cir. 2015), *vacated sub nom.* Medtronic Sofamor Danek USA, Inc. v. NuVasive, Inc., 136 S. Ct. 893 (2016).

428. *Id.* at 1371–72.

429. *Id.* at 1372 n.3.

claim beyond its literal bounds. So the question seems to be, how much of an expansion is too much, and at what point will the judge step in and say the product is so far afield that it cannot be equivalent as a matter of law? We have little guidance on that issue, and even seemingly similar cases yield different results. Although *Cadence* tried mightily to distinguish *Planet Bingo*, the same equivalency argument applies to both cases, i.e., the order of the steps does not matter to the ultimate outcome, whether it is creating a stable solution or finding a bingo winner. Yet the doctrine of equivalents could be applied in *Cadence*, yet not in *Planet Bingo*. One thing is certain, though: vitiation is dead. This will make it more difficult for defendants to obtain summary judgment of non-infringement unless they can find some other legal limitation on the doctrine of equivalents.

One recent case, *Advanced Steel Recovery v. X-Body Equipment, Inc.*,⁴³⁰ may provide such a limitation. The opinion was Judge Stoll's first since joining the Federal Circuit, and it affirms a summary judgment of no equivalents because the patentee failed to introduce evidence that the relevant element in the accused product worked in substantially the same way as what was claimed.⁴³¹ The claim recited a "container packing system" in which a "piston-and-cylinder unit" is connected to the "proximate end" of a "container packer," but, in the accused product, the unit was connected about thirty-five percent down the packer's length.⁴³² The patentee's expert opined that these worked in substantially the same way because "in both cases, the [product's] container packer rides along horizontal guides, and the cylinder unit is hydraulically powered."⁴³³ The court found this testimony insufficient, however, because those other features "are just additional claim elements."⁴³⁴ That was insufficient as a matter of law and violated the "all elements" rule:

A patentee, bearing the burden of showing equivalence, cannot merely point to other claim limitations to satisfy the doctrine of equivalents. Doing so runs afoul of the "all-elements rule" articulated in *Warner-Jenkinson*. Advanced Steel's attempt to establish that the Acculoader functions in substantially the same way as the claimed invention by reference only to other claim elements does not satisfy its burden on the doctrine of equivalents.

430. 808 F.3d 1313 (Fed. Cir. 2015).

431. *Id.* at 1314, 1320.

432. *Id.* at 1315–16.

433. *Id.* at 1320.

434. *Id.*

It is undisputed that the Acculoader's piston-and-cylinder unit is connected to the floor of the container packer approximately [thirty-five percent] away from the extreme proximate end. While the term "proximate end" by no means precludes *some* offset from the absolute end, we find no error in the district court's conclusion that "no reasonable jury could find this connection point to be equivalent to the 'container packer proximate end.'" In view of the evidence of equivalence presented here and the narrowness of the asserted claims, we find the range of equivalents does not extend to the connection point in the Acculoader. To find otherwise would ignore the precise and specific structural limitations in the claims.⁴³⁵

The panel noted that, although the district court had used vitiation to reach this conclusion, it was sufficient simply to say that the patentee had not met its burden on the "way" prong.⁴³⁶ Defendants would thus be well-advised to reframe their non-infringement arguments accordingly in future cases.

Another option for those seeking to limit use of the doctrine of equivalents is to invoke prosecution history estoppel, as in *Spectrum Pharmaceuticals, Inc. v. Sandoz Inc.*⁴³⁷ The claim there required a drug composition with "a quantity at least sufficient to provide *multiple doses* of said mixture of (6S) and (6R) diastereoisomers *in an amount of 2000 mg per dose.*"⁴³⁸ The accused product involved significantly lesser doses, and the court held that the patentee had disclaimed its ability to argue such doses were equivalent.⁴³⁹ The patentee had amended the claims during prosecution to include that specific quantity limitation and distinguished prior art based on quantities of specific mixtures, which constituted "clear and unmistakable expressions of the applicants' intent to surrender coverage of quantities of the compound in lower doses."⁴⁴⁰ So the plaintiff was legally barred from recapturing this subject matter through the doctrine of equivalents.

D. Section 271(g)

The court decided one case, *Momenta Pharmaceuticals, Inc. v. Teva Pharmaceuticals USA, Inc.*,⁴⁴¹ interpreting 35 U.S.C. § 271(g), which

435. *Id.* at 1320–21 (citations omitted).

436. *Id.* at 1320.

437. 802 F.3d 1326, 1337 (Fed. Cir. 2015).

438. *Id.* at 1336.

439. *Id.* at 1338.

440. *Id.*

441. 809 F.3d 610 (Fed. Cir. 2015).

provides that it is an act of infringement to import or sell a product in the United States that is “made by” a patented process abroad.⁴⁴² The key issue was the meaning of the statutory term “made by.” The patent covered a method of analyzing whether the defendant’s drug product contained impurities.⁴⁴³ A split panel held the product was not “made by” the patented method, because “made” means “manufactured,” i.e., “the creation or transformation of a product, such as by synthesizing, combining components, or giving raw materials new properties.”⁴⁴⁴ The term could not, by contrast, “extend to testing to determine whether an already synthesized drug substance possesses existing qualities or properties.”⁴⁴⁵ Here, the patented method related only to the latter type of testing and did not trigger § 271(g): “[A] product is not ‘made by’ a patented process within the meaning of § 271(g) if it is used merely to determine whether the intended product of a separate and perhaps separately-patented process has in fact already been manufactured.”⁴⁴⁶ It did not matter that the FDA’s regulations defined “manufacture” to include “testing and quality control,” because they relate to a different statutory scheme.⁴⁴⁷

Judge Dyk dissented, arguing that the patented method was an integral part of the drug product’s manufacture and thus covered by § 271(g).⁴⁴⁸ “The quality control process of the ’886 patent is an intermediate step to determine which batches of putative enoxaparin must be discarded, and which batches may be incorporated in the final drug product. It is distinctly part of the manufacturing process of the product.”⁴⁴⁹ He noted that § 271(g) is not limited to patents that “cover the entire manufacturing process,” and, after reviewing

442. 35 U.S.C. § 271(g) (2012) (“Whoever without authority imports into the United States or offers to sell, sells, or uses within the United States a product which is made by a process patented in the United States shall be liable as an infringer, if the importation, offer to sell, sale, or use of the product occurs during the term of such process patent.”).

443. *Momenta*, 809 F.3d at 615.

444. *Id.* at 616. Responding to the dissent, the panel noted that purification may meet this requirement because, “as a general matter purification processes transform impure substances into more pure ones.” *Id.* at 618 n.5.

445. *Id.* at 616.

446. *Id.* at 617.

447. *Id.* at 615.

448. *Id.* at 623 (Dyk, J., dissenting).

449. *Id.*

the manufacturing process here, concluded that the patented method was clearly one part of it.⁴⁵⁰

IV. PATENT OFFICE APPEALS

The rise of inter partes review (IPR) has begun to significantly impact the Federal Circuit's docket. Many defendants are now opting to pursue their invalidity challenges through IPR, while district courts are generally staying district court litigation pending IPR.⁴⁵¹ The Patent Office has been an attractive venue for defendants—seventy-two percent of its final written decisions invalidate all the challenged claims.⁴⁵² The short-term result has been to create a wave of Patent Office appeals at the Federal Circuit, with the court deciding over sixty-five of them in 2015, and hearing argument in dozens more.⁴⁵³ The long-term result may be that the Federal Circuit sees a significantly greater percentage of appeals coming from the Patent Office and a significantly fewer district court appeals, as final written decisions invalidating the claims come to replace summary judgment and post-trial decisions.

The most important practical fact about the Federal Circuit's post-grant decisions has been its high affirmance rate. The court affirmed in over eighty-nine percent of appeals from IPR and covered business method (CBM) proceedings, and over half of those were summary affirmances under Federal Circuit Rule 36, in which the court issues no written opinion.⁴⁵⁴ This should be no surprise based on historical experience because the court's affirmance rate for other types of Patent Office appeals (i.e., reexaminations and rejected applications)

450. *Id.*

451. See, e.g., Jonathan Stroud, *NFC Technology LLC v. HTC America, Inc.*: Judge Bryson's Sitting-By-Designation Guide to Securing Stays in Light of Inter Partes Reviews, 65 AM. U. L. REV. __ (2016).

452. *Disposition of IPR Petitions Completed to Date, Patent Trial and Appeal Board Statistics*, U.S. Patent and Trademark Office (last updated January 30, 2016), <http://www.uspto.gov/sites/default/files/documents/2015-11-30%20PTAB.pdf>.

453. Statistics on file with author.

454. Statistics on file with author; see also Craig E. Countryman, *Lessons from Fed. Circ.'s 1st Wave of Post-Grant Appeals*, IPLAW 360 (Dec. 16, 2015, 10:27 AM), <http://www.law360.com/articles/737577/lessons-from-fed-circ-s-1st-wave-of-post-grant-appeals> ("In its first [fifty-five] post-grant appeals, the Federal Circuit has affirmed or dismissed [eighty-nine] percent of them, with most being summary affirmances without opinion.").

has been around ninety percent for the past few years.⁴⁵⁵ The low odds of success on appeal may discourage some IPR losers from even trying their luck, which may help stem the tide of IPR appeals. On the other hand, if the Patent Office invalidates the claims, then a Federal Circuit appeal is probably the patentee's last hope, so most patentees may still roll the dice even if the odds are against them. Patent challengers, by contrast, have more of an option to forgo appeal, because they might still have invalidity and non-infringement defenses left to assert in district court.

Despite the high affirmance rate, the Federal Circuit has issued several important decisions setting the ground rules for IPR and CBM appeals. One important area has been setting the boundaries for what issues the Federal Circuit has jurisdiction to review. Others involve the standards for claim construction and obviousness. Appellants are most likely to have success if they raise an interesting legal issue—the Federal Circuit is unlikely to disturb any factual findings when applying the deferential substantial evidence standard—so the focus going forward will be on identifying those types of issues.

A. Jurisdiction

The Federal Circuit's jurisdiction over appeals from IPR proceedings is governed by two statutes. Section 319 gives the court jurisdiction to review the Patent Trial and Appeal Board's "final written decision" on patentability at the end of the IPR,⁴⁵⁶ while § 314(d) says that the Board's institution decisions "under this

455. See, e.g., *Table B-8: Appeals Filed, Terminated, and Pending During the Twelve-Month Period Ended September 30, 2014*, U.S. COURT OF APPEALS FOR THE FEDERAL CIRCUIT, http://www.cafc.uscourts.gov/sites/default/files/the-court/statistics/appeals_filed_terminated_pending_2014.pdf (Eighty-nine percent affirmance rate for FY 2014); *Table B-8: Appeals Filed, Terminated, and Pending During the Twelve-Month Period Ended September 30, 2013*, U.S. COURT OF APPEALS FOR THE FEDERAL CIRCUIT, <http://www.cafc.uscourts.gov/sites/default/files/the-court/statistics/FY13/appeals%20filed%20term%20pend%209.30.13.pdf> (Ninety-two percent affirmance rate for FY 2013); *Table B-8: Appeals Filed, Terminated, and Pending During the Twelve-Month Period Ended September 30, 2012*, U.S. COURT OF APPEALS FOR THE FEDERAL CIRCUIT, http://www.cafc.uscourts.gov/sites/default/files/the-court/statistics/Appeals_Filed_Terminated_and_Pending_2012_REV.pdf (Ninety percent affirmance rate for FY 2012).

456. 35 U.S.C. § 319 (2012) ("A party dissatisfied with the final written decision of the Patent Trial and Appeal Board under section 318(a) may appeal the decision pursuant to sections 141 through 144.").

section shall be final and nonappealable.”⁴⁵⁷ There was initial controversy over the scope of the appeal bar because the words “under this section” might seem to confine it to blocking review of whether the substantive test for institution of IPR in § 314(a) was met, rather than other procedural reasons for denying institution that appear in statutory “sections” other than § 314. But *St. Jude Medical v. Volcano Corp.*⁴⁵⁸ rejected that argument, holding that any institution is made “under” § 314 (and thus subject to the appeal bar), even if it also implicates a rule from another statutory section, such as the time bar in § 315(b).⁴⁵⁹ And *GTNX, Inc. v. INTTRA, Inc.*⁴⁶⁰ reached a similar conclusion for the analogous CBM appeal bar (in § 324(e)), holding that it could not review a Patent Office decision terminating a CBM proceeding that was blocked by § 325(a).⁴⁶¹

Subsequent decisions have addressed whether the appeal bar blocks review of some interlocutory issues after the final written decision issues. For example, *In re Cuozzo Speed Technologies*⁴⁶² held that the Federal Circuit had no jurisdiction to address whether the Board erred by instituting review on those claims on a ground not set forth in the IPR petition.⁴⁶³ The Board had instituted review of claims 10 and 14 based on a prior art combination that the petition had not made for those claims but had made for dependent claim 17.⁴⁶⁴ The patentee said this violated 35 U.S.C. § 312(a)(3), which requires the petition to “identif[y] . . . with particularity . . . the grounds on which the challenge to each claim is based.”⁴⁶⁵ But the court refused to consider the argument because, although it was styled as a challenge to Board’s final written decision invalidating the claims, the argument actually attacked the institution decision, and § 314(d) therefore blocked review, even as part of an appeal from the

457. 35 U.S.C. § 314(d) (“No Appeal—The determination by the Director whether to institute an inter partes review under this section shall be final and nonappealable.”).

458. 749 F.3d 1373 (Fed. Cir. 2014).

459. *Id.* at 1376.

460. 789 F.3d 1309 (Fed. Cir. 2015).

461. *Id.* at 1313. *GTNX* also stands for the proposition that a Board decision granting a motion to reconsider its institution decision (and thus terminating the IPR) is still properly considered part of the institution itself and is therefore subject to the appeal bar. *Id.* at 1311–12.

462. 793 F.3d 1268 (Fed. Cir. 2015), *cert. granted*, 136 S. Ct. 890 (2016).

463. *Id.* at 1271.

464. *Id.* at 1272.

465. 35 U.S.C. § 312(a)(3) (2012).

final decision.⁴⁶⁶ The court was also unsympathetic because the patentee was trying to capitalize on a technicality: “The fact that the petition was defective is irrelevant because a proper petition could have been drafted.”⁴⁶⁷ In other words, the patentee was saying that even if the claims were actually invalid on the merits, and even though someone else could have drafted a petition that would have justified invalidating them, the court should still set the judgment aside. That is not an attractive argument.

A different panel took a more aggressive approach to judicial review in *Versata Development Group, Inc. v. SAP America, Inc.*, with a majority holding that the Federal Circuit has jurisdiction to review whether the Patent Office correctly determined a patent was a “covered business method” and thus reviewable in a CBM proceeding.⁴⁶⁸ The jurisdictional statutes governing review of CBM proceedings mirror the provisions for IPR, so they present the same interpretative issues.⁴⁶⁹ The majority concluded that it had jurisdiction to review any issue that went to the Board’s power to issue its final written decision, because the Board was not allowed to engage in *ultra vires* acts.⁴⁷⁰ The Board only had power to issue a final decision if the patent was actually a “covered business method,” so the Federal Circuit necessarily had jurisdiction to review that issue.⁴⁷¹ Unlike in *Cuozzo*, “[i]f a particular patent is not a CBM patent, there is no proper pleading that could be filed” to bring it within the Board’s invalidation authority.⁴⁷² The court also noted the “strong

466. *Cuozzo*, 793 F.3d at 1273.

467. *Id.* at 1274.

468. *Id.* at 1309–10, 1329, 1336.

469. Compare 35 U.S.C. § 324(e) (“The determination by the Director whether to institute a post-grant review under this section shall be final and nonappealable.”) and 35 U.S.C. § 329 (“A party dissatisfied with the final written decision of the [Board] . . . may appeal the decision.”), with 35 U.S.C. § 314(d) (“The determination by the Director whether to institute an inter partes review under this section shall be final and nonappealable.”), and 35 U.S.C. § 319 (“A party dissatisfied with the final written decision of the [Board] . . . may appeal the decision.”).

470. *Versata Dev. Grp., Inc. v. SAP Am., Inc.*, 793 F.3d 1306, 1319–21 (Fed. Cir. 2015).

471. *Id.*

472. *Id.* at 1320; see also *id.* at 1322. The majority also left open the possibility that there might be a difference between *Cuozzo* and *Versata* if there were any differences between the appeal bars in § 314(d) and § 324(e). *Id.* at 1322. As discussed below, the Federal Circuit’s later decision in *Achates Reference Publishing, Inc. v. Apple Inc.* would seize on this as a potential distinction. 803 F.3d 652, 653, 656–57 (Fed. Cir. 2015). But the statutory language in the two provisions is identical, so it is difficult to see how one could interpret one differently from the other.

presumption” of judicial review of agency action.⁴⁷³ It did not matter that the Board decided whether the patent was a “covered business method” at the institution stage—the mere fact that the Board found it more efficient to decide the question at the beginning of the proceeding did not change the fact that it impacted the Board’s power to issue a final written decision.⁴⁷⁴

The *Versata* panel majority also held it had jurisdiction to review a second, arguably institution-related issue; namely, whether the Board had correctly concluded that it could address invalidity under 35 U.S.C. § 101 in a CBM proceeding.⁴⁷⁵ “The authority of the PTAB under the relevant statutes to apply § 101 law to the claims under review goes to the power of the PTAB to decide the case presented to it.”⁴⁷⁶ So, the Federal Circuit could review the issue for the same reasons it could review whether the patent was a “covered business method.”⁴⁷⁷

Judge Todd Hughes dissented from both jurisdictional rulings.⁴⁷⁸ He saw both questions as impacting the Board’s “authority to institute review,” placing them squarely within § 324(e)’s appeal bar.⁴⁷⁹ Judge Hughes recognized that the majority’s rationale could theoretically be extended to any challenge to the institution decision, noting that “any limit on the Board’s authority to institute review is indirectly a limit on its authority to invalidate a patent: If the Board cannot institute review in the first place, it cannot issue a final written decision.”⁴⁸⁰ The result would be to eviscerate much of the appeal bar, confining it to blocking only interlocutory challenges to the institution decision, an interpretation that even the majority agreed was wrong.⁴⁸¹ Judge Hughes also thought the majority’s holding conflicted with *Cuozzo*, which he said “addressed just as much a predicate question of authority to invalidate as we are presented with here.”⁴⁸²

Interestingly, *Versata* had also sought review of the Patent Office’s decision that the patent was a CBM by filing suit under the Administrative Procedure Act (APA) attacking the institution

473. *Versata*, 793 F.3d at 1320.

474. *Id.* at 1323, 1339.

475. *Id.* at 1329.

476. *Id.*

477. *Id.*

478. *Id.* at 1337 (Hughes, J., dissenting in part).

479. *Id.* at 1340.

480. *Id.*

481. *Id.*

482. *Id.* at 1341.

decision.⁴⁸³ The same panel affirmed the district court's dismissal of that suit based on the appeal bar in § 324(e).⁴⁸⁴ The panel explained that "since the attempt by Versata to obtain judicial review of the PTAB's decision to institute a CBM review in this case was addressed to the PTAB's determinations at the decision to institute stage, the district court was correct in barring judicial review pursuant to subsection 324(e)."⁴⁸⁵ This result was significant for two reasons: (1) it shows that an APA suit cannot be used to circumvent the appeal bar, and (2) it shows that a party can obtain review over an agency's power to act after a final decision but not in an interlocutory appeal.

A subsequent case dealt with the uneasy coexistence of *Cuozzo* and *Versata* by shifting the balance toward *Cuozzo*. In *Achates Reference Publishing, Inc. v. Apple Inc.*,⁴⁸⁶ the Federal Circuit held that it did not have jurisdiction to review the Patent Office's refusal to deny institution based on the time bar in § 315(d).⁴⁸⁷ This might at first seem a straight-forward application of *St. Jude*, but the panel went out of its way to cabin *Versata* and limit it to the specific CBM proceedings. *Achates* held that the time-bar did not go to the Board's power to invalidate a claim, but instead was something that could have been fixed with proper pleading, like the complaint in *Cuozzo*: "[T]he § 315(b) time bar does not impact the Board's authority to invalidate a patent claim—it only bars particular petitioners from challenging the claim. The Board may still invalidate a claim challenged in a time-barred petition via a properly-filed petition from another petitioner."⁴⁸⁸ *Achates* also viewed the time bar as establishing a procedural rule, not as itself giving the Board the power to invalidate a patent.⁴⁸⁹

So, the trend seems to be toward broad application of the appeal bar in § 314(d), although that may not last because the Supreme Court has granted certiorari in *Cuozzo* and may alter the analysis.⁴⁹⁰

483. *Id.* at 1317.

484. *Versata Dev. Grp., Inc. v. Lee*, 793 F.3d 1352, 1354 (Fed. Cir. 2015).

485. *Id.*

486. 803 F.3d 652 (Fed. Cir. 2015).

487. *Id.* at 653.

488. *Id.* at 657.

489. *Id.*

490. *In re Cuozzo Speed Techs., LLC*, 793 F.3d 1268 (Fed. Cir. 2015) (presenting the question "[w]hether the court of appeals erred in holding that, even if the Board exceeds its statutory authority in instituting an IPR proceeding, the Board's decision whether to institute an IPR proceeding is judicially unreviewable"), *cert. granted*, 136 S. Ct. 890 (2016).

For now, though, the Federal Circuit's current jurisprudence still leaves it a potential safety valve to review egregious decisions related to institution. *Cuozzo* suggested that the court "may" be able to review a decision to institute on petition for mandamus, instead of direct appeal.⁴⁹¹ Writs of mandamus are difficult to get—they require proof of (1) the absence of alternative remedies, (2) a "clear and indisputable right" to relief, and (3) that the writ is "appropriate under the circumstances" as judged by the court's discretion.⁴⁹² The first condition will always be satisfied by institution-related challenges, given the court's broad application of § 314(d), but the latter two leave broad discretion to deny mandamus, even if the requestor would win in a regular appeal. No Federal Circuit decision has granted mandamus in an IPR or CBM proceeding, while plenty have denied it.⁴⁹³ If the Federal Circuit uses mandamus at all, it will only be in extraordinary circumstances. Only time will tell what those are.

B. Claim Construction in IPR and CBM Proceedings

Claim construction is generally an attractive issue to appeal because it is ultimately a question of law that is reviewed de novo where the tribunal below resolves it based only on the intrinsic evidence.⁴⁹⁴ But patentees challenging a Patent Office decision face an additional hurdle because the Board applies the "broadest reasonable interpretation" (BRI) standard, putting a thumb on the scales in favor of a defendant, who wants a broad construction to sweep in prior art.⁴⁹⁵ Two aspects of the Federal Circuit's jurisprudence on claim construction in post-grant appeals are notable—the first relates to whether the BRI standard should apply in inter partes review, and the second is about what is required to obtain reversal of the Patent Office's claim construction.

491. *Id.* at 1274 ("Cuozzo argues that Congress would not have intended to allow the PTO to institute IPR in direct contravention of the statute The answer is that mandamus may be available to challenge the PTO's decision to grant a petition to institute IPR after the Board's final decision in situations where the PTO has clearly and indisputably exceeded its authority.").

492. *Id.* at 1275.

493. See, e.g., *id.* at 1274; *GTNX, Inc. v INTTRA, Inc.*, 789 F.3d 1309, 1310 (Fed. Cir. 2015); *In re MCM Portfolio, LLC*, 554 F. App'x 944, 945 (Fed. Cir. 2014); *In re Dominion Dealer Sols., LLC*, 749 F.3d 1379, 1380 (Fed. Cir. 2014); *In re Procter & Gamble Co.*, 749 F.3d 1376, 1377 (Fed. Cir. 2014); *In re Bd. of Trs. Univ. Ill.*, 564 F. App'x 1021, 1022 (Fed. Cir. 2014); *In re Versata Dev. Grp.*, 564 F. App'x 1025, 1026 (Fed. Cir. 2014).

494. *Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 841 (2015).

495. See *Cuozzo*, 793 F.3d at 1275.

1. *Broadest reasonable interpretation*

The applicability of the BRI standard to post-grant proceedings deeply split the Federal Circuit. A divided panel in *Cuozzo* held that the Patent Office can apply the BRI standard in IPRs,⁴⁹⁶ and the full court subsequently refused to rehear that decision en banc by a vote of 6-5.⁴⁹⁷ Some historical background will put the judges' disagreement in context. The BRI standard originally developed as an expedient in the original examination of patents. The thought was that a broad interpretation would force applicants to clarify their claims and include specific language to avoid prior art, thereby preventing a patentee from later taking a position about the breadth of its claims during litigation that would have caused the patent examiner to reject them (had he viewed them so broadly).⁴⁹⁸ The Patent Office and Federal Circuit gradually expanded it to other proceedings, like interferences, reissues, and reexaminations, where the applicant again had free reign to amend its claims.⁴⁹⁹ The doctrine also had an exception in the latter set of proceedings—it did not apply to expired patents because patentees could not amend an expired patent's claims.⁵⁰⁰

Inter partes review is arguably different from these other proceedings. It is an adversarial adjudication, not an examination-style back and forth between applicant and examiner. Moreover, a patentee's ability to amend its claims is very limited in an IPR—it is allowed to move to amend, but the Patent Office has broad authority to refuse to entertain amendments if the patentee does not demonstrate the amended claims are patentable over the prior art of record, to ensure that the IPR proceeding is quickly concluded with the statutory time limits.⁵⁰¹ “[T]he patent office had rarely allowed such amendments in practice: It has granted only two motions to

496. *Id.* at 1278–79.

497. *In re Cuozzo Speed Techs., LLC*, 793 F.3d 1297 (Fed. Cir. 2015) (per curiam).

498. See, e.g., *In Re Prater*, 415 F.2d 1393, 1404–05 (C.C.P.A. 1969); *Podlesak v. McInnerney*, 26 App. D.C. 399, 406 (D.C. Cir. 1906); see also *In re Am. Acad. of Sci. Tech Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004) (“Giving claims their broadest reasonable construction ‘serves the public interest by reducing the possibility that claims, finally allowed, will be given broader scope than is justified.’”).

499. See, e.g., *In re Yamamoto*, 740 F.2d 1569, 1570 (Fed. Cir. 1984) (ex parte reexamination); *In re Reuter*, 670 F.2d 1015, 1019 (C.C.P.A. 1981) (reissues); *Fontijn v. Okamoto*, 518 F.2d 610, 617–18 (C.C.P.A. 1975) (interferences).

500. *In re Rambus, Inc.*, 753 F.3d 1253, 1256 (Fed. Cir. 2014).

501. 35 U.S.C. §§ 316(d)(1), 326(d)(1) (2012) (motions to amend); 37 C.F.R. § 42.221 (2014) (same).

amend in the over [nine hundred] IPR proceedings completed so far.”⁵⁰² Given the difficulty of amending, the traditional rationale for applying BRI is absent from IPR proceedings.

The *Cuozzo* panel majority, however, concluded that the Patent Office was within its discretion to use the BRI standard for post-grant proceedings.⁵⁰³ Congress had given the Patent Office the authority to issue regulations governing IPR proceedings, and the Patent Office had adopted the BRI standard in one of those regulations.⁵⁰⁴ The Patent Office’s decision was consistent with the long history of applying BRI in a variety of proceedings, and nothing in the AIA’s text or history suggested that BRI was not to be used. Moreover, this case did not present any undue restrictions on motions to amend because the proposed amended claims were broader than others that had previously been flagged as unpatentable.⁵⁰⁵ At a minimum, Congress was silent on the question, and the Board’s regulation was reasonable under *Chevron* deference.⁵⁰⁶ Judge Newman dissented, however, pointing to the adjudicatory nature of IPRs, the limited opportunities to amend, and the fact that claims should be given their “correct” construction.⁵⁰⁷

The opinions at the rehearing stage made similar arguments. Judge Dyk, who wrote the panel decision, concurred in the denial of rehearing en banc, joined by Judges Lourie, Chen, and Hughes.⁵⁰⁸

502. Craig E. Countryman & Michael M. Rosen, *How Patent Reform Could Affect Claim Construction in IPR*, LAW360 (May 20, 2015, 11:42 AM), <http://www.fr.com/wp-content/uploads/2015/05/How-Patent-Reform-Could-Affect-Claim-Construction-In-IPR-Law360.pdf>.

503. *Cuozzo*, 793 F.3d at 1276–78. The *Cuozzo* panel initially issued their opinions in February 2015, reported at 778 F.3d 1271 (Fed. Cir. 2015), but then reissued significantly amended opinions in July 8, 2015, on the same day as the full court’s denial of rehearing en banc. In particular, the *Cuozzo* panel majority amended their opinion to leave open the possibility that BRI might be subject to challenge in a case where the Patent Office had acted arbitrarily in denying a motion to amend. *Id.* at 1278 (“If there are challenges to be brought against other restrictions on amendment opportunities as incompatible with using the broadest reasonable interpretation standard, they must await another case.”).

504. *Id.* at 1275–76 (citing 35 U.S.C. § 316(a)(2)–(4) and 37 C.F.R. § 42.100(b)).

505. *Id.* at 1272.

506. *Id.* at 1279 (finding that the statute was ambiguous regarding what standard the Patent Office should use to construe the claim, step one of the *Chevron* test, and then, under step two, that the Patent Office’s use of the broadest reasonable interpretation standard was a reasonable interpretation of the statute, therefore warranting *Chevron* deference).

507. *Id.* at 1285, 1287–88 (Newman, J., dissenting).

508. *Id.* at 1298 (Dyk, J., concurring).

He reiterated that nothing in the legislative history suggested that Congress wanted a different claim construction standard to apply to IPRs than to all other Patent Office proceedings.⁵⁰⁹ Congress had legislated against the backdrop of BRI, and it had given the Patent Office discretion to make procedural regulations for IPR, which included the ability to set the claim construction standard.⁵¹⁰ “In the absence of evidence of congressional intent to abrogate the broadest reasonable interpretation standard, we should not act to adopt a different standard based on our own notions of appropriate public policy. If the standard is to be changed, that is a matter for Congress.”⁵¹¹

Chief Judge Sharon Prost and Judges Newman, Moore, O’Malley, and Reyna issued a joint dissent from denial of rehearing en banc.⁵¹² The dissenters stressed that Congressional silence was just that—silence—and did not shed any light on whether BRI was the right standard.⁵¹³ The court thus had to decide the issue from first principles, and the traditional rationale for applying BRI did not apply where, as here, there was no “give-and-take between applicant and examiner.”⁵¹⁴ Instead, it is an adjudicatory proceeding, like a district court litigation, which is streamlined to be efficient, has limited rights to amend claims, and is more like a trial.⁵¹⁵ The dissenters also questioned the panel’s assertion that BRI might not apply in a particular case where the patentee was improperly denied the right to amend:

If the opinion means to imply that the correctness of the broadest reasonable interpretation standard depends on the specific type of amendments available in a given IPR, we find the suggestion problematic, as we do not see how the Board can be expected to determine whether a certain amendment restriction calls for one claim construction standard or another.⁵¹⁶

The joint dissent also questioned whether *Chevron* deference to the Patent Office’s regulation was appropriate, although it would not have upheld the regulation even with such deference.⁵¹⁷ Judge

509. *Id.* at 1299.

510. *Id.*

511. *Id.*

512. *Id.* (Prost, C.J., Newman, J., Moore, J., O’Malley, J., Reyna, J., dissenting).

513. *Id.* at 1299–1300.

514. *Id.* at 1300–01.

515. *Id.* at 1301.

516. *Id.* at 1302.

517. *Id.* at 1302–03.

Newman also separately dissented to stress the views of amici who described the problems with the panel's holding.⁵¹⁸

The ongoing debate over BRI continues on two fronts. First, the Supreme Court has granted certiorari in *Cuozzo* and decide by June 2016 whether BRI applies in IPR proceedings.⁵¹⁹ Second, multiple bills have been proposed in Congress to eliminate the BRI standard for inter partes review.⁵²⁰ The bills have gotten hung up due to disputes on other, unrelated issues, but the BRI section seems likely to be included if Congress is able to pass a bill. Either way, the fractured en banc decisions will not be the last word on this issue.

2. *The Federal Circuit's analysis of the Board's constructions*

Given that "broadest reasonable interpretation" remains the governing standard, the Federal Circuit has affirmed most Patent Office claim constructions as reasonable.⁵²¹ There is little to say about those decisions other than that parties who try to use the specification to import limitations are unlikely to succeed, especially given the BRI standard. The Federal Circuit's two claim construction reversals, however, provide a roadmap for patentees who want to salvage their claims from invalidation.

*Microsoft Corp. v. Proxyconn, Inc.*⁵²² reversed two overbroad constructions as inconsistent with the claim language.⁵²³ The patent was directed to a system for expediting network data access by having a "sender/computer" transmit a short data digest that, if recognized by the "receiver/computer," eliminates the need to send the entire underlying document.⁵²⁴ The system could also include "gateway"

518. *Id.* at 1303 (Newman, J., dissenting).

519. *In re Cuozzo Speed Techs., LLC*, 793 F.3d 1268 (Fed. Cir. 2015), *cert. granted*, 136 S. Ct. 890 (2016).

520. See Innovation Act, H.R. 9, 114th Cong. § 9(b) (2015); Support Technology and Research for Our Nation's Growth (STRONG) Patents Act of 2015, S. 632, 114th Cong. §§ 102(a), 103(a) (2015).

521. See, e.g., *Prolitec, Inc. v. ScentAir Techs., Inc.*, 807 F.3d 1353, 1363–64 (Fed. Cir. 2015); *Sightsound Techs., LLC v. Apple Inc.*, 809 F.3d 1307 (Fed. Cir. 2015). In addition, *Cuozzo* also dealt with claim construction, but, oddly, the patentee argued on appeal for a broader construction, which made little sense because it would sweep in more prior art, rendering the claims even more invalid. See 793 F.3d at 1280 (explaining the patentee's argument that the phrase "integrally attached" should be construed to mean "joined or combined to work as a complete unit," not, as the Board construed it, "discrete parts physically joined together as a unit without each part losing its own separate identity").

522. 789 F.3d 1292 (Fed. Cir. 2015).

523. *Id.* at 1308–09.

524. *Id.* at 1296.

and “caching” computers to further facilitate matters.⁵²⁵ The court held that the term “gateway . . . connected to said packet-switched network in such a way that network packets sent between at least two other computers” should have been limited so the “two other computers” were the sending and receiving computers and could not include the caching computer.⁵²⁶ The claim recited the “two other computers” independently of the caching and gateway computers, and the word “other” further distinguished them.⁵²⁷ Moreover, the specification consistently used “two other computers” to refer to the sending and receiving computers.⁵²⁸

The court also held that the terms “sender/computer” and “receiver/computer” were not broad enough to include intermediaries.⁵²⁹ The claim language itself seemed to exclude the presence of additional machines—it referred to a sender “computer” and receiver “computer,” and the specification referred to them as separate components from the rest of the network.⁵³⁰

The other notable decision was *Straight Path IP Group, Inc. v. Sipnet EU S.R.O.*,⁵³¹ which held that the term “transmitting . . . a query as to whether the second process is connected to computer network” required that the computer was connected at the time the query was transmitted.⁵³² The claim language had “a meaning that can only be called plain,” because of the present tense word “is.”⁵³³ “The question asked by the query is whether the device ‘is’ connected, not whether it was connected or whether it is still registered as being connected even if that registration information is no longer accurate.”⁵³⁴ Such clear claim language could not be overcome by anything in the specification:

When claim language has as plain a meaning on an issue as the language does here, leaving no genuine uncertainties on interpretive questions relevant to the case, it is particularly difficult to conclude that the specification reasonably supports a different meaning. The specification plays a more limited role than in the

525. *Id.*

526. *Id.* at 1298–99.

527. *Id.* at 1299.

528. *Id.*

529. *Id.* at 1300.

530. *Id.*

531. 806 F.3d 1356 (Fed. Cir. 2015).

532. *Id.* at 1359–60.

533. *Id.* at 1360.

534. *Id.*

common situation where claim terms are uncertain in meaning in relevant respects.⁵³⁵

The panel then stressed the primacy of the claim language, with the specification mainly coming into play (absent disclaimer or lexicography) only when the claims have a range of possible ordinary meanings:

Reflecting the distinct but related roles of the claims and specification, the governing approach to claim construction thus maintains claim language's key (not always decisive) role in claim construction: it stresses the importance of the specification in identifying and resolving genuine uncertainties about claim language, and in stating redefinitions or disavowals, while it rejects a sequenced, dictionary-driven, burden-shifting approach to claim construction. Under our *Phillips* approach, the plainness of the claim language necessarily affects what ultimate conclusions about claim construction can properly be drawn based on the specification. For that reason, the court has repeatedly stated since *Phillips* that redefinition or disavowal is required where claim language is plain, lacking a range of possible ordinary meanings in context.⁵³⁶

The specification there fell far short of the required “redefinition or disavowal.”⁵³⁷

The bottom line is that a patentee seeking a narrow construction needs a clear hook in the claim language. The patentee needs to show that any broader construction is “unreasonable,” and the only way to do that is to demonstrate the claim language forecloses the broader construction. *Proxyconn* and *Straight IP* reversed the Board because the claim language left them no other choice.

C. Obviousness

Obviousness might at first seem an issue where an appellant could get traction, for it is a legal determination subject to de novo review. But obviousness turns on underlying facts—such as what a prior art reference would disclose to the skilled artisan, the presence of a motivation to combine, and whether the objective indicia have the required connection or “nexus” to the claimed invention—and the Federal Circuit reviews the Board's decisions on these matters for substantial evidence.⁵³⁸ The court has thus affirmed in most obviousness appeals because they rise or fall with the Board's findings

535. *Id.* at 1361.

536. *Id.* (citations omitted).

537. *Id.* at 1361–63.

538. See *In re Cuozzo Speed Techs., LLC*, 793 F.3d 1268, 1280–81 (Fed. Cir. 2015).

on underlying facts.⁵³⁹ Two reversals, however, are worth examining in more detail.

The first is *Belden Inc. v. Berk-Tek LLC*,⁵⁴⁰ which involved a situation in which the Board invalidated the broader claims but confirmed the patentability of the narrower, dependent claims.⁵⁴¹ The Board has done this with increasing frequency in recent months, often taking an overly formalistic approach and allowing narrower claims that add little to the invalidated claims. *Belden* shows that the court will intervene if the Board's split decision does not make sense. The Federal Circuit reversed on the dependent claims, holding them invalid because there was no dispute that the prior art taught all the claim elements, and the Board's reasons for finding no motivation to combine were all legally irrelevant.⁵⁴² It was encouraging to see the panel dig into the Board's technical reasoning on the narrower claims, and hopefully future panels will do the same when the Board departs from the flexible obviousness inquiry required by *KSR International, Co. v. Teleflex Inc.*⁵⁴³

The other is *Ariosa Diagnostics v. Verinata Health, Inc.*,⁵⁴⁴ which vacated a non-obviousness finding where it was unclear whether the Board properly considered all the relevant evidence.⁵⁴⁵ The panel's holding was potentially quite narrow—it reiterated the long-standing rule that prior art can be relevant to the obviousness inquiry even if it

539. See, e.g., *Redline Detection, LLC v. Star Envirotech, Inc.*, 811 F.3d 435, 452 (Fed. Cir. 2015) (finding that substantial evidence supported the Board's finding of no motivation to combine); *Merck & Cie v. Gnosis S.P.A.*, 808 F.3d 829, 838–39 (Fed. Cir. 2015) (finding substantial evidence of motivation to combine and no objective indicia); *S. Ala. Med. Sci. Found. v. Gnosis S.P.A.*, 808 F.3d 823, 824–25 (Fed. Cir. 2015) (same); *SightSound Techs., LLC v. Apple Inc.*, 809 F.3d 1307, 1319 (Fed. Cir. 2015) (finding substantial evidence of motivation to combine and no teaching away, and dismissing evidence of commercial success where there was no direct proof the success was the “direct result of a unique characteristic” of the claimed invention); *Progressive Cas. Ins. Co. v. Liberty Mut. Ins. Co.*, 625 F. App'x 552, 557 (Fed. Cir. 2015) (finding substantial evidence of motivation to combine); *Trs. of Columbia Univ. v. Illumina, Inc.*, 620 F. App'x 916, 928–29 (Fed. Cir. 2015) (finding substantial evidence regarding reasonable expectation of success and lack of secondary indicia); *Cuozzo*, 793 F.3d at 1280–82 (finding that substantial evidence supported Board's findings of motivation to combine and disclosures in various prior art references).

540. 805 F.3d 1064 (Fed. Cir. 2015).

541. *Id.* at 1068, 1072.

542. *Id.* at 1075–77.

543. 550 U.S. 398, 417 (2007).

544. 805 F.3d 1359 (Fed. Cir. 2015).

545. *Id.* at 1365.

is not part of the formal obviousness “combination.”⁵⁴⁶ The Board has a tendency toward formalism over substance, so this will be a useful point for petitioners in future cases. Nevertheless, it was hardly clear that the Board had engaged in such formalism here: “The Board might have been saying only that the development of the argument invoking [the Board’s incorrectly limited consideration of] Exhibit 1010 in the Petitions was not adequate.”⁵⁴⁷ So this case was hardly a win for the petitioner—on remand, the Board could adopt that rationale and again confirm the claims as patentable.

D. Claim Amendments

With all the controversy over the “broadest reasonable interpretation” standard, one might think that the Board’s denials of patentee motions to amend the claims might be a fruitful avenue to pursue on appeal. But, so far, the Federal Circuit has affirmed those denials, while hinting that some aspects of the Board’s rules might be too strict.

The main example is *Microsoft Corp. v. Proxyconn, Inc.*⁵⁴⁸ The Patent Office had issued very general regulations governing amendments,⁵⁴⁹ and then a Board panel added several more specific requirements.⁵⁵⁰ *Proxyconn* dealt with the Board’s requirement that a patent owner demonstrate that any proposed amended claims have “patentable distinction over the prior art of record.”⁵⁵¹ The Federal Circuit first held that the Board was free to impose requires beyond those in the regulation, crediting the Director’s argument that the rule was appropriately developed through adjudication, once the Board had more practical experience with the issue.⁵⁵² The court then concluded that the Board’s rule was reasonable, given that any amended claim would immediately become part of the patent, without further examination:

546. *Id.* (“Art can legitimately serve to document the knowledge that skilled artisans would bring to bear in reading the prior art identified as producing obviousness.”).

547. *Id.* at 1366.

548. 789 F.3d 1292 (Fed. Cir. 2015).

549. *Microsoft Corp. v. Proxyconn, Inc.*, 789 F.3d 1292, 1304 (Fed. Cir. 2015) (citing 37 C.F.R. §§ 42.20, 42.121 (2013)).

550. *See id.* at 1304–05 (citing *Idle Free Sys., Inc. v. Bergstrom, Inc.*, No. IPR2012–00027, 2013 WL 5947697 (P.T.A.B. June 11, 2013)).

551. *See id.* at 1304, 1307 (quoting *Idle Free*, 2013 WL 5947697, at *4).

552. *Id.* at 1307.

During IPRs, once the PTO grants a patentee's motion to amend, the substituted claims are not subject to further examination. Moreover, the petitioner may choose not to challenge the patentability of substitute claims if, for example, the amendments narrowed the claims such that the petitioner no longer faces a risk of infringement. If the patentee were not required to establish patentability of substitute claims over the prior art of record, an amended patent could issue despite the PTO having before it prior art that undermines patentability. Such a result would defeat Congress's purpose in creating IPR as part of "a more efficient and streamlined patent system that will improve patent quality and limit unnecessary and counterproductive litigation costs."⁵⁵³

The panel was quick to note, however, that it was not addressing some of the Board's other more potentially suspect limitations on amendments, such as the requirement of demonstrating patentability over all "prior art known to the patent owner," even if not of record:

Importantly, this case does not call on us to decide whether *every* requirement announced by the Board in *Idle Free* constitutes a permissible interpretation of the PTO's regulations. The *Idle Free* decision is not itself before us, and we resolve this case only with respect to the Board's having faulted Proxyconn for "attempt[ing] to distinguish claims [35 and 36] only from the prior art for which we instituted review of corresponding claims [1 and 3]" and, ultimately, for "fail[ing] to establish by a preponderance of evidence that [claims 35 and 36] are patentable over DRP." We do not address the other requirements of *Idle Free* that the Board relied upon. Nor do we address, for example, *Idle Free's* requirement that the patentee to [sic] show patentable distinction over all "prior art known to the patent owner."⁵⁵⁴

This reasoning in *Proxyconn* is a strong signal that the Federal Circuit might strike down that requirement in a future case, if it is the sole basis for denying a motion to amend.

Another recent Federal Circuit decision dealing with a motion to amend was *Prolitec, Inc. v. Scentair Technologies, Inc.*,⁵⁵⁵ which held that the patentee's burden to demonstrate patentability "over the prior art of record" includes cited prior art in the original prosecution history:

The prior art references cited in the original patent's prosecution history often will be the closest prior art and will already have been reviewed by the patentee. Evaluating the substitute claims in light of this prior art helps to effectuate the purpose of IPRs to "improve

553. *Id.* at 1307–08 (citing H.R. REP. NO. 112-98, pt. 1, at 40 (2011)).

554. *Id.* at 1307 n.4 (citations omitted).

555. 807 F.3d 1353 (Fed. Cir. 2015).

patent quality and limit, unnecessary and counterproductive litigation costs.”⁵⁵⁶

Moreover, the patentee should have known that prior art from the original prosecution invalidated the proposed amended claims, given the Board’s rejection of other claims based on that prior art and the patentee’s own concessions about what the art taught.⁵⁵⁷ In both *Prolitec* and *Proxyconn*, the court stressed that “[t]his is not a case in which the patentee was taken by surprise by the Board’s reliance on an entirely new reference or was not given adequate notice and opportunity to present arguments distinguishing that reference.”⁵⁵⁸ The upshot is that a future case presenting such a problem might well be a candidate for reversal.

E. What Constitutes a “Covered Business Method” Patent

“Covered business method” proceedings, alluded to above in the discussion of *Versata*, are a special type of post-grant proceeding that Congress established for a limited, eight-year period.⁵⁵⁹ These proceedings are similar in some respects to IPR but are more favorable to the petitioner in other respects. In particular, petitioners can raise more invalidity grounds in a CBM that are not available in IPR;⁵⁶⁰ petitioners can obtain immediate appellate review if a district court denies a stay pending CBM,⁵⁶¹ and the estoppel provisions for CBM are narrower, as the provisions apply in district court only to grounds actually raised and resolved, not to grounds that “reasonably could have [been] raised.”⁵⁶² So, both parties have much at stake over whether a patent is a “covered business method.”

The statute itself offers little guidance on what constitutes a CBM, and delegates authority to the Patent Office to further define the term; however, the Patent Office has not added much to help the analysis.⁵⁶³ The statute defines a “covered business method patent” as

556. *Id.* at 1363–64 (quoting *Proxyconn*, 789 F.3d at 1308).

557. *Id.* at 1364–65.

558. *Id.* at 1365 (quoting *Proxyconn*, 789 F.3d at 1308).

559. AIA, Pub. L. No. 112-29, § 18(a)(3), 125 Stat. 284, 330 (2011); *see supra* notes 468–77 and accompanying text.

560. Petitioners in the CBM process can raise 35 U.S.C. § 101 and § 112 invalidity claims.

561. AIA § 18(b).

562. *Compare* AIA, § 18(a)(1)(D) (“any ground that the petitioner raised”), *with* 35 U.S.C. § 315(e)(2) (2012) (“any ground that the petitioner raised or reasonably could have raised”).

563. *See* AIA, § 18(d); 37 C.F.R. § 42.301(a) (2013).

one dealing with “a financial product or service,” with an exception for technological inventions.⁵⁶⁴

The Patent Office regulations provide no further insight into what constitutes a “financial product or service” but impose some additional requirements on the “technological invention” exception:

(a) *Covered business method patent* means a patent that claims a method or corresponding apparatus for performing data processing or other operations used in the practice, administration, or management of a financial product or service, except that the term does not include patents for technological inventions.

(b) *Technological invention*. In determining whether a patent is for a technological invention solely for purposes of the Transitional Program for Covered Business Methods (section 42.301(a)), the following will be considered on a case-by-case basis: whether the claimed subject matter as a whole recites a technological feature that is novel and unobvious over the prior art; and solves a technical problem using a technical solution.⁵⁶⁵

Two Federal Circuit decisions have addressed these definitions, with both decided against the patentee.

In *Versata*, the Federal Circuit, after going to great lengths to hold that it had jurisdiction to decide the issue, determined that a patent covering a method of determining a product price offered to a purchaser was a CBM.⁵⁶⁶ The panel rejected the argument that a CBM was limited to “products and services of only the financial industry, or to patents owned by or directly affecting the activities of financial institutions such as banks and brokerage houses.”⁵⁶⁷ The statutory text “on its face covers a wide range of finance-related activities” and “makes no reference to financial institutions as such, and does not limit itself only to those institutions.”⁵⁶⁸ Moreover, although the Federal Circuit rejected the Patent Office’s attempt to explain the definition of “technological invention,” remarking that “neither the statute’s punt to the USPTO nor the agency’s lateral of the

564. AIA, § 18(d)(1) (“[T]he term ‘covered business method patent’ means a patent that claims a method or corresponding apparatus for performing data processing or other operations used in the practice, administration, or management of a financial product or service, except that the term does not include patents for technological inventions.”).

565. 37 C.F.R. § 42.301.

566. See *Versata Dev. Grp., Inc. v. SAP Am., Inc.*, 793 F.3d 1306, 1323–27 (Fed. Cir. 2015) (assessing the CBM definition and applying it to the patent in question), *petition for cert. filed*, 84 U.S.L.W. 3530 (U.S. Mar. 11, 2016) (No. 15-1145).

567. *Id.* at 1325.

568. See *id.* (discussing the text of AIA, § 18(d)(1)).

ball offer anything very useful,”⁵⁶⁹ the patent here was not technological because it required no special software or hardware and was “more akin to creating organizational management charts.”⁵⁷⁰

In *SightSound Technologies, LLC v. Apple Inc.*,⁵⁷¹ the Federal Circuit expanded the CBM definition even further, holding that a patent for electronically selling digital audio was covered.⁵⁷² The panel accepted the Board’s reasoning that the patent was “directed to activities that are financial in nature,” and that “the electronic sale of something, including charging a fee to a party’s account, is a financial activity, and allowing such a sale amounts to providing a financial service.”⁵⁷³ This holding seems to expand the term CBM because almost any patent involves something that can be sold; the distinction here, it appears, is that the patent claims themselves expressly recited obtaining the fee. The panel also held, unremarkably, that the patent was not a technological invention because it used an obvious combination of “known technologies.”⁵⁷⁴

Whatever the merits of their arguments, however, the patentees in these cases were taking an impractical stance. They wanted the Federal Circuit to vacate the invalidity judgment, regardless of whether the patent actually *was* invalid, based on a procedural technicality, which is terrible policy.⁵⁷⁵ The defendants would then be forced to reargue the same invalidity issues in district court, making the Patent Office’s expenditure of resources for naught and imposing significant costs on litigation and the judiciary.⁵⁷⁶ It is difficult to imagine the Federal Circuit permitting this outcome when the statute is vague enough to avoid it. It does suggest, however, that a patentee who wants to challenge whether a CBM proceeding is proper should try to seek mandamus before the proceeding

569. *Id.* at 1326.

570. *Id.* at 1327.

571. 809 F.3d 1307 (Fed. Cir. 2015).

572. *Id.* at 1311, 1315.

573. *Id.* at 1315–16 (internal citation omitted).

574. *Id.* at 1315.

575. *See id.* at 1313 (“SightSound contends that we should set aside the final decision because the proceedings were improperly initiated since Apple did not explicitly raise the issue of obviousness in its petitions.”).

576. In these circumstances, the defendant would unlikely be able to file an IPR because the grounds are either unreviewable, *see, e.g.*, *Versata Dev. Grp., Inc. v. SAP Am., Inc.*, 793 F.3d 1306, 1336 (Fed. Cir. 2015), *petition for cert. filed*, 84 U.S.L.W. 3530 (U.S. Mar. 11, 2016) (No. 15-1145), or, even if the grounds were reviewable, *see, e.g.*, *SightSound Techs., LLC v. Apple Inc.*, 809 F.3d 1307, 1318 (Fed. Cir. 2015), the one-year bar for filing an IPR would have passed. 35 U.S.C. § 315(b) (2012).

concludes; otherwise, these pragmatic considerations will block the argument if the Patent Office invalidates the patent.

F. Procedural Issues in Post-Grant Proceedings

Procedural challenges are another tempting path for parties that lose an IPR because they seem to raise broader “legal” issues about fairness rather than requiring the Federal Circuit to second-guess the Board’s factual findings on complicated technical issues. But the Board still gets significant deference, and no procedural challenges have succeeded so far.

For example, in *Belden Inc. v. Berk-Tek LLC*,⁵⁷⁷ the court rejected the patentee’s complaint that a petitioner improperly included new evidence in a reply expert declaration.⁵⁷⁸ The Board acted within its discretion because it considered only material that was responsive to the patentee’s expert, it gave the patentee an additional chance to cross-examine the expert and file observations about the testimony, and it allowed the patentee to file a reply.⁵⁷⁹ Parties are thus unlikely to succeed with a procedural quibble unless they can identify something that the Board prevented them from doing that could have changed the result.

Likewise, the Board has broad discretion to control the timing of the parties’ submissions. In *Redline Detection, LLC v. Star Envirotech, Inc.*,⁵⁸⁰ a petitioner moved under 37 C.F.R. § 42.123 to submit “supplemental information,” including a sixty-page expert declaration and additional prior art, after the Board instituted review.⁵⁸¹ The Board denied the motion, noting that the petitioner had not shown any reason why it could not have submitted the information earlier but had only done so because it was supposedly more “cost effective.”⁵⁸² The Federal Circuit affirmed because nothing in § 42.123(a) required the Patent Office to accept the evidence, while the Patent Office reasonably determined that allowing parties to submit such evidence would undermine the speed and efficiency of proceedings.⁵⁸³ The court’s decisions in prior IPRs and treatment of the Patent Office’s regulations, in addition to the history of the regulations, showed significant deference to the agency.

577. 805 F.3d 1064 (Fed. Cir. 2015).

578. *Id.* at 1082.

579. *Id.*

580. 811 F.3d 435 (Fed. Cir. 2015).

581. *Id.* at 440, 442.

582. *Id.* at 442.

583. *Id.* at 443–44.

Another decision, *Dynamic Drinkware, LLC v. National Graphics, Inc.*,⁵⁸⁴ addressed who has the burden of proof on whether a prior art patent is entitled to the priority date of its provisional application.⁵⁸⁵ The court held that the petitioner bears the burden of proof to show that the prior art is entitled to the earlier priority date, as part of its overall burden to prove invalidity.⁵⁸⁶ The petitioner also bears a burden of production on that issue, which, if met, shifts to the patentee.⁵⁸⁷ In this case, the petitioner originally relied on the prior art's later filing date, but then the patentee put in evidence of an earlier reduction to practice.⁵⁸⁸ The burden then shifted back to the petitioner to show that the prior art was entitled to the earlier provisional filing date, which was before the reduction to practice. The petitioner failed to meet that burden by relying only on the erroneous argument that there was a "presumption" in favor of giving the prior art patent its earlier provisional filing date.⁵⁸⁹ There is no such presumption.

Finally, the Federal Circuit rejected a constitutional challenge to the IPR process in *MCM Portfolio LLC v. Hewlett-Packard Co.*,⁵⁹⁰ holding that the process is consistent with both Article III of the U.S. Constitution and the Seventh Amendment.⁵⁹¹ The court reviewed extensive precedent upholding the constitutionality of reissue and reexamination proceedings and concluded that IPR is no different.⁵⁹² Both aspects of the decision turned on the fact that patents are public rights that are initially granted by the Patent Office: "There is notably no suggestion that Congress lacked authority to delegate to the PTO the power to issue patents in the first instance. It would be odd indeed if Congress could not authorize the PTO to reconsider its own decisions."⁵⁹³ Likewise, "[b]ecause patent rights are public rights, and their validity [is] susceptible to review by an administrative agency, the Seventh Amendment poses no barrier to agency

584. 800 F.3d 1375 (Fed. Cir. 2015).

585. *Id.* at 1378, 1381.

586. *Id.* at 1378–79.

587. *Id.* at 1379–80.

588. *Id.*

589. *Id.* at 1380.

590. 812 F.3d 1284 (Fed. Cir. 2015).

591. *Id.* at 1285.

592. *Id.* at 1287–93.

593. *Id.* at 1291.

adjudication without a jury.”⁵⁹⁴ Constitutional challenges are unlikely to succeed in patent litigation. *MCM* is just the latest example.

G. Jurisdiction to Appeal from a Denial of Stay Pending CBM

As noted earlier, one benefit of filing a petition for CBM review rather than an IPR is that, for CBM, the America Invents Act entitles the defendant to take an immediate interlocutory appeal if the district court refuses to stay the case.⁵⁹⁵ But, in *Intellectual Ventures II LLC v. JPMorgan Chase & Co.*,⁵⁹⁶ a split panel differed over precisely how soon such an appeal can occur. The relevant statutory provisions refer to the ability to seek a stay pending “a transitional [CBM] proceeding” and to obtain interlocutory review of such a ruling:

(b) REQUEST FOR STAY.—

(1) IN GENERAL.—If a party seeks a stay of a civil action alleging infringement of a patent under section 281 of title 35, United States Code, *relating to a [transitional CBM] proceeding for that patent*, the court shall decide whether to enter a stay . . .

(2) REVIEW.—A party may take an immediate interlocutory *appeal from a district court’s decision under paragraph (1)*. The United States Court of Appeals for the Federal Circuit shall review the district court’s decision to ensure consistent application of established precedent, and such review may be de novo.⁵⁹⁷

The majority concluded that the statute’s reference to a “proceeding” requires that the district court have decided a stay motion filed after the Patent Office actually initiated review before the Federal Circuit can review the decision.⁵⁹⁸ The majority noted that the statute distinguishes between a CBM “proceeding” and CBM “petition,” explaining that a “proceeding” begins only after the Patent Office institutes review.⁵⁹⁹ Delaying review until after institution was also consistent with the statute’s apparent purpose, which was to provide for review in the rare circumstance in which a court denied a stay, despite the Patent Office having instituted proceedings.⁶⁰⁰

Judge Hughes dissented, arguing that the panel’s textual analysis was overly narrow and conflicted with the statutory purpose.⁶⁰¹ The

594. *Id.* at 1293.

595. AIA, Pub. L. No. 112-29, § 18(b), 125 Stat. 284, 331 (2011).

596. 781 F.3d 1372 (Fed. Cir. 2015).

597. *Id.* at 1375 (quoting AIA, § 18(b)) (emphasis added).

598. *Id.* at 1377–79.

599. *Id.* at 1377–78.

600. *Id.* at 1377.

601. *Id.* at 1379–80 (Hughes, J., dissenting).

CBM program was designed, Judges Hughes explained, as an alternative to civil litigation, and stays were to be granted “in all but the rarest of circumstances.”⁶⁰² Although the majority’s textual analysis was “reasonable,” it could not be squared with Congress’s goal of ensuring that parties did not have to waste money litigating in district court when validity could be resolved more cheaply at the Patent Office. Parties should not be forced to litigate in district court while waiting for the Patent Office to decide whether to institute CBM review because, if review is eventually granted and the patent invalidated, the district court fees would all be wasted. In addition, Judge Hughes thought that delaying review undermined the legislative goal of uniformity in stay decisions, as all such pre-institution decisions are now unreviewable.⁶⁰³

H. Decisions in Examination and Reexamination Proceedings

The Federal Circuit also decided three other cases dealing with procedural issues in older reexamination proceedings and in an original examination proceeding.

The first, *Power Integrations, Inc. v. Lee*,⁶⁰⁴ held that when the Patent Office construes claims under the broadest reasonable interpretation, it still must address a prior district court construction that is argued to it by the patentee.⁶⁰⁵ Although the Board is not bound by the prior district court construction, this “does not mean, however, that it has no obligation to acknowledge that interpretation or to assess whether it is consistent with the broadest reasonable construction of the term.”⁶⁰⁶ This logic would seem to apply equally to IPR proceedings where a district court has previously construed the claims at issue, although the situation may be less likely to arise there if the district court stays the co-pending litigation.

Next, *Airbus S.A.S. v. Firepass Corp.*⁶⁰⁷ dealt with a procedural issue within inter partes reexamination.⁶⁰⁸ When the patentee added new claims, the examiner refused to enter the requestor’s proposed obviousness rejection, finding no “substantial new question of patentability,” but rejected the claims under 35 U.S.C. § 112.⁶⁰⁹ The

602. *Id.* at 1380.

603. *Id.* at 1381.

604. 797 F.3d 1318 (Fed. Cir. 2015).

605. *Id.* at 1326–27.

606. *Id.* at 1326.

607. 793 F.3d 1376 (Fed. Cir. 2015).

608. *Id.* at 1376–77.

609. *Id.* at 1377.

Board reversed the § 112 rejection and refused to entertain the requestor's cross-appeal on obviousness.⁶¹⁰ The Federal Circuit reversed the refusal to entertain the cross-appeal.⁶¹¹ Precedent barring Board review of an examiner's determination of whether there is a substantial question of patentability with respect to *original* claims was inapplicable here because reexamination was already ongoing, so a different regulation, 37 C.F.R. § 1.948(a)(2),⁶¹² applied.⁶¹³

Finally, *Hyatt v. U.S. Patent and Trademark Office*⁶¹⁴ dealt with a peculiar issue involving Gilbert Hyatt, a recalcitrant patent applicant who had dragged out the pendency of hundreds of his applications to allow himself to write over 115,000 claims, filed decades after his original priority dates, which date back to the 1970s.⁶¹⁵ The operative provision of 35 U.S.C. § 122(a) required the Patent Office to keep these applications secret, except "in such special circumstances as may be determined by the Director."⁶¹⁶ The court rejected the Patent Office's position that its "special circumstances" were not reviewable under the APA, and concluded that any disclosed information "must be linked to the 'special circumstances' justifying the disclosure."⁶¹⁷ The Patent Office acted within its discretion in enforcing 37 C.F.R. § 1.75(b),⁶¹⁸ which forbids applicants from unduly multiplying their claims, by disclosing information about the pending claims and the specifications, given the unique volume of claims, all of which stood to have a term of seventeen years from issuance if allowed.⁶¹⁹

I. Burden of Proof in Action Under § 145

A patentee in an *ex parte* reexamination filed before November 29, 1999 has the right to seek review of an adverse decision by filing suit in district court under 35 U.S.C. § 145.⁶²⁰ One hopes that there are few such proceedings still pending, but the Federal Circuit dealt with an appeal from one in *Dome Patent L.P. v. Lee*.⁶²¹

610. *Id.*

611. *Id.* at 1381.

612. 37 C.F.R. § 1.948(a)(2) (2016).

613. *Airbus S.A.S.*, 793 F.3d at 1379–81.

614. 797 F.3d 1374 (Fed. Cir. 2015).

615. *Id.* at 1377.

616. *Id.* at 1378 (quoting 35 U.S.C. § 122(a) (2012)).

617. *Id.* at 1383.

618. 37 C.F.R. § 1.75(b) (2016).

619. *Id.* at 1384–85.

620. 37 C.F.R. § 1.303(a) (2012).

621. 799 F.3d 1372 (Fed. Cir. 2015).

The issue was whether the Patent Office bears the burden of proving invalidity in district court by clear and convincing evidence or by only a preponderance of the evidence.⁶²² The court held that preponderance was the right standard because, in reexamination, the examiner is conducting another substantive examination, and the patentee only has the right to its patent if the examiner concludes it is patentable.⁶²³ “When the Patent Office institutes *ex parte* reexamination, it reopens prosecution to determine whether the claimed subject matter should have been allowed in the first place.”⁶²⁴ Section 282 is therefore inapplicable because there is no issued patent.

In addition, the rationale underlying the clear and convincing burden is absent in a court action challenging the Patent Office’s invalidation decision. The purpose of reexamination is to give the Patent Office a second chance to scrutinize the patent. “We would hinder this intent if we required the district court here to presume that the reexamined claim is valid because of the Patent Office’s previous determination and, consequently, to impose a burden to defend its own subsequent reexamination decision by clear and convincing evidence.”⁶²⁵

V. EQUITABLE DEFENSES

A. *Laches*

The en banc Federal Circuit reassessed the applicability and scope of laches in patent cases in *SCA Hygiene Products Aktiebolag SCA Personal Care, Inc. v. First Quality Baby Products, LLC*.⁶²⁶ The court split 6-5 on the issue of whether laches bars past damages, with the majority holding that it does.⁶²⁷ The court unanimously agreed laches can bar prospective injunctive relief, overruling *A.C. Aukerman Co. v. R.L. Chaides Construction Co.*,⁶²⁸ but noted that it will not bar imposition of an ongoing royalty “absent egregious circumstances.”⁶²⁹ The Federal Circuit’s decision won’t be the last word, though, because the Supreme Court recently announced it will review these holdings during the October 2016 term.

622. *Id.* at 1377–78.

623. *Id.* at 1378–79.

624. *Id.* at 1379.

625. *Id.*

626. 807 F.3d 1311 (Fed. Cir. 2015) (en banc).

627. *Id.* at 1315.

628. 960 F.2d 1020 (Fed. Cir. 1992) (en banc).

629. *SCA*, 807 F.3d at 1332–33.

The Federal Circuit convened en banc to address the impact of the Supreme Court's holding in *Petrella v. Metro-Goldwyn-Mayer, Inc.*,⁶³⁰ which held that laches was unavailable to bar past damages in copyright cases.⁶³¹ *Petrella* based its conclusion on copyright's statute of limitations,⁶³² which provides that "[n]o civil action shall be maintained . . . unless it is commenced within three years after the claim accrued."⁶³³ Applying laches to bar all pre-suit damages would conflict with this statute, which barred only damages from infringement more than three years before filing suit. Moreover, the copyright statute permits the defendant to deduct its own contributions from any damages under the statute, already minimizing economic prejudice from delay that might otherwise be triggered by its investments in a product that was later accused of infringement.⁶³⁴ Finally, laches is an equitable doctrine designed to deal only with claims without a statute of limitations, and thus has no applicability to bar past damages, a legal remedy. *Petrella* noted, however, that a plaintiff's delay in bringing suit was a factor to consider in deciding whether to issue injunctive relief.⁶³⁵

The SCA en banc majority held that laches can still bar past damages in patent cases, despite *Petrella*.⁶³⁶ The majority noted that patent law has a similar statute of limitations, which provides that "[e]xcept as otherwise provided by law, no recovery shall be had for any infringement committed more than six years prior to the filing of the complaint or counterclaim for infringement in the action."⁶³⁷ But the patent statute also included a different provision that codified the laches defense—35 U.S.C. § 282(b)(1) makes "unenforceability" a defense to patent infringement, and, according to P.J. Federico, a co-author of the 1952 Act, this provision would include "equitable defenses such as laches."⁶³⁸ The copyright statute contained no such codification. Moreover, the regional circuits uniformly applied laches before the 1952 Act; the two decisions to explicitly consider the question held that the laches defense

630. 134 S. Ct. 1962 (2014).

631. *Id.* at 1967.

632. *Id.* at 1973–74.

633. *Id.* at 1973 (citing 17 U.S.C. § 507(b) (2012)).

634. *See* 17 U.S.C. § 504(b).

635. 134 S. Ct. at 1978–79.

636. SCA, 807 F.3d at 1315.

637. 35 U.S.C. § 286 (2012).

638. SCA, 807 F.3d at 1318 (quoting P.J. Federico, *Commentary on the New Patent Act*, 75 J. PAT. & TRADEMARK OFF. SOC'Y 161, 215 (1993)).

extended to barring legal relief;⁶³⁹ and all the others implicitly assumed that laches barred legal relief.⁶⁴⁰ The majority also noted a practical difference between copyright and patent law—the former requires proof of copying, which suggests that infringers are on notice of potential infringement claims and are thus at less risk of prejudice from a plaintiff’s delay.⁶⁴¹ By contrast, patent infringers may face strict liability and be accused of infringing patents of which they have no notice based on products they independently developed, making it more difficult for them to plan their investment.⁶⁴²

Judge Hughes, joined by Judges Moore, Wallach, Taranto, and Chen, dissented on this issue.⁶⁴³ They thought that § 286’s statute of limitations expressly ruled out a laches defense (as in *Petrella*), while § 282(b)’s reference to “unenforceability” was too vague to justify engrafting a laches defense.⁶⁴⁴ The dissenters questioned the majority’s reliance on a single statement made in Federico’s *Commentary* to infer that Congress intended to permit laches as a defense because the statement was made two years after § 282 was passed and by someone—namely, Federico—who was not a member of Congress.⁶⁴⁵ Instead, the dissenters believed the statement referred to the traditional form of laches that barred equitable remedies, not one that barred legal damages.⁶⁴⁶ As for the pre-1952 case law, the dissenters thought the appropriate reference point was Supreme Court precedent outside patent law that held laches was not

639. See *Banker v. Ford Motor Co.*, 69 F.2d 665, 666 (3d Cir. 1934) (authorizing “equitable defenses in actions at law theretofore applicable only in equity”); *Ford v. Huff*, 296 F. 652, 658 (5th Cir. 1924) (noting that under section 27b of the Judicial Code, “a defendant in an action at law who files a plea setting up an equitable defense is given the same rights as if he had set them up in a bill in equity”).

640. See generally *Middleton v. Wiley*, 195 F.2d 844, 847 (8th Cir. 1952) (discussing the availability of laches as a grounds to deny relief); *Brennan v. Hawley Prods. Co.*, 182 F.2d 945, 947 (7th Cir. 1950) (same); *Fr. Mfg. Co. v. Jefferson Elec. Co.*, 106 F.2d 605, 609 (6th Cir. 1939) (same); *Universal Coin Lock Co. v. Am. Sanitary Lock Co.*, 104 F.2d 781, 782 (7th Cir. 1939) (same); *Hartford-Empire Co. v. Swindell Bros., Inc.*, 96 F.2d 227, 233 (4th Cir. 1938) (same); *George J. Meyer Mfg. Co. v. Miller Mfg. Co.*, 24 F.2d 505, 507 (7th Cir. 1928) (same); *Wolf, Sayer & Heller, Inc. v. U.S. Slicing Mach. Co.*, 261 F. 195, 197–98 (7th Cir. 1919) (same).

641. *SCA*, 807 F.3d at 1330.

642. *Id.*

643. *Id.* at 1333 (Hughes, J., concurring in part, dissenting in part) (dissenting specifically to the majority’s holding that laches is an available defense to claims for damages brought within a statutory limitations period).

644. *Id.* at 1335.

645. *Id.* at 1337.

646. *Id.*

a defense to legal remedies.⁶⁴⁷ And the dissenters dismissed the various regional circuit cases as either silent on laches' applicability to legal remedies, ambiguous, or incorrectly decided.⁶⁴⁸ Finally, policy was irrelevant because *Petrella* controlled the issue.⁶⁴⁹

Both the majority and dissent agreed, though, that laches is a factor to consider when assessing the propriety of injunctive relief.⁶⁵⁰ As such, laches is not a per se bar to an injunction.⁶⁵¹ *Aukerman's* view that laches cannot bar an injunction was based on a misreading of precedent, and it was reached at a time, before *eBay*, when the court erroneously treated injunctions as automatic.⁶⁵²

But ongoing royalties were a different matter. SCA cited precedent suggesting that the patentee remained entitled to ongoing royalties, despite delay in bringing suit.⁶⁵³ It also stressed the importance of maintaining a difference between equitable estoppel (which bars all relief, including ongoing royalties, based on reliance on the patentee's misleading conduct) and laches (which can apply without misleading conduct).⁶⁵⁴

The Federal Circuit's only other laches case in 2015 was *Carnegie Mellon University v. Marvell Technology Group, Ltd.*,⁶⁵⁵ in which the district court refused to bar pre-suit damages.⁶⁵⁶ The district court thought that both elements of laches were met—including an "inexcusable" delay of over six years and "some" evidentiary prejudice—yet exercised its discretion not to bar pre-suit damages based on the defendant's own "particularly egregious conduct," e.g., "blatant and prolonged copying."⁶⁵⁷ The Federal Circuit affirmed, rejecting the defendant's argument that its copying could be relevant only if it caused the plaintiff's delay.⁶⁵⁸

647. *Id.* at 1338.

648. *Id.* at 1339.

649. *Id.* at 1342.

650. *Id.* at 1331–32 ("Many of the facts relevant to laches, such as the accused infringer's reliance on the patentee's delay, fall under the balance of the hardships factor. Unreasonable delay in bringing suit may also be relevant to a patentee's claim that continued infringement will cause it irreparable injury.").

651. *Id.* ("More than anything, district courts should consider all material facts, including those giving rise to laches, in exercising its discretion . . . under *eBay* to grant or deny an injunction.").

652. *Id.* at 1331–32.

653. *Id.* at 1332.

654. *Id.* at 1333.

655. 807 F.3d 1283 (Fed. Cir. 2015).

656. *Id.* at 1288.

657. *Id.* at 1298–99.

658. *Id.* at 1298.

B. Exhaustion

The Federal Circuit decided one important exhaustion case in 2015, *Helperich Patent Licensing, LLC v. New York Times Co.*,⁶⁵⁹ which reversed a summary judgment of exhaustion and held that the doctrine protected only “authorized acquirers” of a licensed product, not just anyone who might happen to use the product in an infringing method.⁶⁶⁰ The asserted claims covered systems and methods for transmitting data to wireless communications devices (e.g., phones and other handsets).⁶⁶¹ The patentee previously licensed its portfolio to handset manufacturers, but then sued content providers who sent data to the handsets.⁶⁶² Lacking allegations that authorized acquirers infringed the asserted claims, exhaustion did not bar the suit, even though the patents covered use of the already licensed handsets.⁶⁶³ This case involved no such allegation—the plaintiff’s allegations were only against third parties transmitting data to the handsets, not the handset users themselves.⁶⁶⁴

Moreover, unlike in prior cases involving complementary products, the patentee had separate patents on the handset itself and on content transmission, and the defendants had not argued that the asserted claims could be infringed only with a handset that had the inventive features covered in the patentee’s other patents.⁶⁶⁵

The court then declined to extend precedent to cover this case, emphasizing that (1) cases grounding exhaustion in the common law of property suggested that the doctrine only protected the activities of the handset owners; (2) Congressional silence on exhaustion supported hewing closely to precedent; (3) expanding exhaustion to cover related products or third-party use could have dramatic implications for patent policy in the areas of software, communications, and social networking; and (4) restriction requirements imposed by the Patent Office reinforced that the content claims and handset claims were directed to distinct

659. 778 F.3d 1293 (Fed. Cir. 2015).

660. *Id.* at 1295–97.

661. *Id.* at 1295–96.

662. *Id.* at 1296–97.

663. *Id.* at 1302 (“The doctrine has never applied unless, at a minimum, the patentee’s allegations of infringement, whether direct or indirect, entail infringement of the asserted claims by authorized acquirers—either because they are parties accused of infringement or because they are the ones allegedly committing the direct infringement required by the indirect infringement charged against other parties.”).

664. *Id.* at 1299.

665. *Id.* at 1309.

inventions.⁶⁶⁶ It thus vacated the grant of summary judgment and remanded, noting that its opinion might not foreclose other, more narrowly framed, exhaustion defenses on particular claims because they have not been presented on appeal.⁶⁶⁷

Helpferich has been the source of academic controversy.⁶⁶⁸ Professor Ernst argued that *Helpferich* “imposes a wholly novel restriction on the exhaustion doctrine by holding that the doctrine only protects ‘authorized acquirers’ of a device.”⁶⁶⁹ In his view, the “exhaustion doctrine promotes the policy against servitudes attaching to goods in commerce in restraint of the free trade and use of those goods,” and should thus bar suit against anyone accused of infringement based on use of the licensed goods.⁶⁷⁰ The focus of patent exhaustion is the patented device, not “certain persons” authorized to use the device.⁶⁷¹ By contrast, Professor Rinehart believes that the Federal Circuit’s “authorized acquirers” concept is not novel—the difficulty with *Helpferich* is not that the Federal Circuit stretches the exhaustion doctrine in a new way, but that the doctrine . . . fails to provide an easy way to remove infringement liability in an increasingly complex world of patent assertion.”⁶⁷² The debate turns on an analysis of Supreme Court precedent, some of which is either old, unclear, or both, suggesting that the Court needs to resolve the debate about the meaning of its prior decisions. But it will not happen in *Helpferich* because the defendants did not seek certiorari.

666. *Id.* at 1295–96, 1305–08.

667. *Id.* at 1311.

668. Compare Samuel F. Ernst, *The Federal Circuit’s New “Authorized Acquirer” Restriction on Patent Exhaustion*, PATENTLY-O (Feb. 16, 2015) [hereinafter Ernst, *Authorized Acquirer Restriction*], <http://patentlyo.com/patent/2015/02/authorized-restriction-exhaustion.html> (concluding that *Helpferich*’s interpretation of the exhaustion doctrine “directly [contradicts] Supreme Court precedent”), and Samuel F. Ernst, *Patent Exhaustion for the Exhausted Defendant: Should Parties Be Able to Contract Around Exhaustion in Settling Patent Litigation?*, 2014 U. ILL. J.L. TECH. & POL’Y 445, 445–46 (arguing that provisions in agreements that effectively “preclude[] application of the exhaustion doctrine” are not enforceable), with Amelia Smith Rinehart, *Guest Counterpoint: Patent Exhaustion and Helpferich’s Assertion Problem*, PATENTLY-O (Mar. 5, 2015) <http://patentlyo.com/patent/2015/03/counterpoint-exhaustion-helferichs.html> (disagreeing with Professor Ernst and arguing that the Federal Circuit’s ruling was not novel or broad).

669. Ernst, *Authorized Acquirer Restriction*, *supra* note 668.

670. *Id.*

671. *Id.*

672. Rinehart, *supra* note 668.

VI. REMEDIES

A. *Reasonable Royalties*

The Federal Circuit took a relatively deferential approach to its review of reasonable royalty awards this year, affirming most of the methodologies it considered and rejecting arguments that the patentee had failed to properly apportion damages. The court also reiterated that exclusion of the patentee's expert does not necessarily justify summary judgment of no damages. It did, however, set aside awards that failed to adequately account for the value of standard-essential patents or that covered post-expiration or extraterritorial activities.

*AstraZeneca AB v. Apotex Corp.*⁶⁷³ provides a typical example of the Federal Circuit's deference. It affirmed a fifty percent royalty on the gross profit margin for sales of a generic drug product and rejected the defendant's challenges to the rate and an alleged failure to apportion.⁶⁷⁴ As an initial matter, the defendant was wrong to try to limit royalties to the "harm actually suffered," because the reasonable royalty theory of damages "seeks to compensate the patentee not for lost sales caused by the infringement, but for its lost opportunity to obtain a reasonable royalty that the infringer would have been willing to pay if it had been barred from infringing."⁶⁷⁵ Here, the patentee would have demanded a high rate because the generic drug's entry would destroy its market and erode prices.⁶⁷⁶ In addition, the generic had no non-infringing alternative, and "if avoiding the patent would be difficult, expensive, and time-consuming, the amount the infringer would be willing to pay for a license is likely to be greater."⁶⁷⁷ Another company's formulation was not a non-infringing alternative because that company's patents covered its formulation, meaning it was unavailable to the defendant here.⁶⁷⁸

The plaintiff's settlements with other generics for between fifty and seventy percent rates were also instructive because they were negotiated after the district court found infringement and validity, making them comparable to the hypothetical negotiation.⁶⁷⁹ And,

673. 782 F.3d 1324 (Fed. Cir. 2015).

674. *Id.* at 1332–38.

675. *Id.* at 1333–34.

676. *Id.*

677. *Id.* at 1335.

678. *Id.* at 1340.

679. *Id.* at 1336.

finally, the royalty still left the defendant with a healthy profit margin that was typical for the industry.⁶⁸⁰

AstraZeneca also found no error in applying the royalty rate to the defendant's entire drug product.⁶⁸¹ Although the entire market value rule is not per se inapplicable to pharmaceuticals, it did not apply here. The patent was for a product with three key elements—the drug core, coating, and subcoating—and the invention was the unique combination of those elements.⁶⁸² Because *AstraZeneca's* patents “cover the infringing product as a whole, not a single component of a multi-component product,” the product lacked any unpatented or non-infringing features.⁶⁸³ It was thus appropriate to address damages under a *Georgia-Pacific* analysis, in which factors 9, 10, and 13⁶⁸⁴ already require assessing the importance of the inventive contribution, while bearing in mind that “it is improper to assume that a conventional element cannot be rendered more valuable by its use in combination with an invention.”⁶⁸⁵ The court noted that when assessing damages, rather than subtracting the value of all conventional elements from the value of the patented invention as a whole, “the question is how much new value is created by the novel combination, beyond the value conferred by the conventional elements alone.”⁶⁸⁶ Here, the inventive subcoating permitted *AstraZeneca* to create a commercially viable product where it otherwise could not have, so it was appropriate to also include the value of the active ingredient when calculating damages.⁶⁸⁷

AstraZeneca did, however, vacate the district court's award of royalty damages for the sale of defendant's product made after the patent expired.⁶⁸⁸ The patentee had sought those damages because, in the real world, the defendant would have been unable to sell its product

680. *Id.* at 1334.

681. *Id.* at 1337–38.

682. *Id.* at 1338.

683. *Id.*

684. *Id.* (describing that factors nine and ten in *Georgia-Pacific* “refer to ‘the utility and advantages of the patent property over any old modes or devices that had been used’ and ‘the nature of the patented invention, its character in the commercial embodiment owned and produced by the licensor, and the benefits to those who used it,’ respectively[,]” and that factor thirteen “refers to the ‘portion of the realizable profit that should be credited to the invention’”).

685. *Id.*

686. *Id.* at 1339.

687. *Id.*

688. *Id.* at 1344.

during that period due to the FDA's pediatric exclusivity period.⁶⁸⁹ But the court rejected this argument because the patent statute does not permit damages for post-expiration sales.⁶⁹⁰

Another case, *Summit 6, LLC v. Samsung Electronics Co.*,⁶⁹¹ similarly took a deferential approach, affirming a \$15 million lump sum verdict as supported by substantial evidence.⁶⁹² The court criticized the defendant for "conflat[ing]" the issue of whether a license should have been excluded with whether, once it was admitted, it could support the verdict.⁶⁹³ The defendant had challenged only the latter, and the license was probative because it involved the patent-in-suit and was to another party that also sold camera phones with the accused functionality.⁶⁹⁴ So the license, coupled with the patentee's expert testimony, supported the verdict. But the court rejected the patentee's cross-appeal seeking future royalties; the jury had specifically indicated that it was awarding a "lump sum," and the patentee's expert had admitted that a lump sum would compensate through the entire patent term.⁶⁹⁵

Carnegie Mellon University v. Marvell Technology Group, Ltd. dealt with two substantive challenges to a \$1.17 billion reasonable royalty verdict—one to the rate and form of the royalty, and the other to its inclusion of extraterritorial activity.⁶⁹⁶ The Federal Circuit once again gave the patentee significant leeway. With respect to the first issue, substantial evidence supported use of a per unit royalty (as opposed to lump sum) because it "ties compensation paid to revealed marketplace success, minimizing under- and over-payment risks from lump-sum payments agreed to in advance."⁶⁹⁷ Although the plaintiff had entered other lump sum licenses, they were distinguishable because they were extensive, long-standing collaboration agreements

689. *Id.* at 1341.

690. *Id.* at 1342.

691. 802 F.3d 1283 (Fed. Cir. 2015).

692. *Id.* at 1299–1301.

693. *Id.* at 1299.

694. *Id.* at 1299–1300.

695. *Id.* at 1300–01.

696. 807 F.3d 1283, 1288 (Fed. Cir. 2015). The panel also rejected a Rule 702 challenge to the expert's qualifications and methodology, noting that the expert had ample experience calculating patent damages and was relying on technical experts for other non-economic parts of her opinion. *Id.* at 1303. The panel also found her expert reports thorough, complete, and admissible. *Id.* The district court held an extensive *Daubert* hearing, which reinforced the panel's conclusion that there was no abuse of discretion in admitting the testimony. *Id.* at 1302–03.

697. *Id.* at 1304.

entered when the technology had not yet been commercialized, and the payments were structured so the parties shared the risks and costs of that research.⁶⁹⁸ Moreover, the royalty rate of \$0.50 per unit was well-supported because (1) the defendant identified no alternative to the patented technology, (2) the patented technology was so significant that it was used industry-wide, (3) the defendant faced strong market pressures to improve chip performance at the time of the hypothetical negotiation, (4) the defendant's attempts to develop other solutions were failing, and (5) the royalty still left the defendant with "upwards of three quarters of the per-chip profit."⁶⁹⁹

The court vacated part of the royalty due to extraterritoriality issues, however. The court approved some aspects of the patentee's calculations. For example, the patentee was entitled to damages if one of the activities listed in 35 U.S.C. § 271(a)—making, using, selling, offering to sell, or importing—occurs in the United States, even if the others do not.⁷⁰⁰ Moreover, although the patents involved only method claims, the parties were using a physical product to measure damages; it was enough if that product was made, used, sold, offered for sale, or imported in the United States, especially because the "product practices the method in its normal intended use" and "the hypothetical negotiation would have employed the number of units sold to measure the value of the method's domestic use (before production and after)."⁷⁰¹

The problem was that the jury was not instructed that it could only award damages for chips made and delivered abroad if they were "sold" in the United States.⁷⁰² The Federal Circuit did not attempt to elaborate on the legal standard for determining what constitutes a "sale within the United States" under § 271(a), instead leaving this for remand, where additional facts could be developed.⁷⁰³ However, the court did conclude that the patentee's evidence was enough to avoid JMOL against it at this stage of the proceedings.⁷⁰⁴ Much of the activity related to the defendant's "design win[s]," which determined

698. *Id.* at 1304–05.

699. *Id.* at 1305. On the last point, this is (coincidentally?) the same profit amount that the now-rejected twenty-five percent rule of thumb would have left for the defendant, but, here, the other evidence tied the facts of the case to the royalty awarded by the jury.

700. *Id.* at 1306–08.

701. *Id.* at 1306–07.

702. *Id.* at 1310.

703. *Id.* at 1311.

704. *Id.* at 1308.

which chips went into mass production in the United States, including “designing, simulating, testing, evaluating, [and] qualifying the chips by Marvell as well as by its customers.”⁷⁰⁵ Further, the defendant provided samples from California to customers and “specific contractual commitments for specific volumes of chips were made in the United States.”⁷⁰⁶ A remand was thus appropriate to further develop this evidence and determine which chips, if any, were sold in the United States.

The only decision setting aside a royalty based on improper methodology was *Commonwealth Scientific and Industrial Research Organisation v. Cisco Systems, Inc.*,⁷⁰⁷ which vacated a \$16.2 million judgment entered after a bench trial.⁷⁰⁸ The court upheld the first part of the district judge’s methodology, where the judge assessed a per unit royalty based on the defendant’s end-products rather than a smaller salable unit within the products.⁷⁰⁹ The judge adopted his preferred base by relying on the parties’ actual prior negotiations, which had used end-products as the basis, but were still a negotiation over the value of the asserted patent “and no more.”⁷¹⁰ This was permissible because the fact-finder can calculate royalties based on sufficiently comparable licenses, even if those licenses do not use the smallest salable unit as the base:

The rule Cisco advances—which would require all damages models to begin with the smallest salable patent-practicing unit—is untenable. It conflicts with our prior approvals of a methodology that values the asserted patent based on comparable licenses. . . . Where the licenses employed are sufficiently comparable, this method is typically reliable because the parties are constrained by the market’s actual valuation of the patent.⁷¹¹

To hold otherwise might sometimes result in excluding comparable license valuations that “may be the most effective method of estimating the asserted patent’s value.”⁷¹²

Nevertheless, the district court committed legal error by failing to sufficiently adjust its per unit rate to account for any extra value of the patent that was attributable to the fact that it was essential to the

705. *Id.* at 1309.

706. *Id.*

707. 809 F.3d 1295 (Fed. Cir. 2015).

708. *Id.* at 1306–07.

709. *Id.* at 1302–04.

710. *Id.* at 1303.

711. *Id.* (citations omitted) (footnote omitted).

712. *Id.* at 1303–04.

wireless standard.⁷¹³ Damage awards for standard-essential patents cannot be determined by the added value resulting from the standard's widespread adoption, but, instead, must only consider the value added from the patent's superior technology.⁷¹⁴ This rule applies to all standard essential patents, not just those encumbered by obligations to license at a reasonable and non-discriminatory rate.⁷¹⁵ The rule ensures that patentees are not the only recipients of all of the advantages afforded by the standardization-benefit by allowing such benefits to "flow to consumers and businesses practicing the standard."⁷¹⁶ The district court, however, had legally erred by adjusting the royalty rate upward based on the fact the patent is the subject of the standard.⁷¹⁷ Moreover, it failed to account for the fact that the starting royalty rates in the parties' negotiations may include value due to the standard and thus need to be adjusted downward.⁷¹⁸

The district court also erred by discounting a prior license on related technology between the plaintiff and the defendant's predecessor-in-interest.⁷¹⁹ Although the original license was earlier and based on a close relationship between the parties, it was subsequently amended after the defendant acquired the licensee and near the time of the hypothetical negotiation.⁷²⁰ Moreover, the district court was wrong to exclude it simply because it used the accused the chip rather than the entire end-product as the base, because "a license may not be excluded solely because of its chosen royalty base."⁷²¹ The district court thus had to give further consideration to the license on remand.

Finally, *Info-Hold, Inc. v. Muzak LLC* held that striking the plaintiff's expert report does not automatically require a summary judgment of zero damages.⁷²² The district court had correctly excluded the expert based on his reliance on the twenty-five percent rule and invocation of the entire market value rule without showing the patented feature

713. *Id.* at 1305–06.

714. *Id.* at 1304 (“[D]amages awards for SEPs [standard-essential patents] must be premised on methodologies that attempt to capture the asserted patent’s value resulting not from the value added by the standard’s widespread adoption, but only from the technology’s superiority.”).

715. *Id.* at 1304–05.

716. *Id.* at 1305.

717. *Id.* at 1305–06.

718. *Id.*

719. *Id.* at 1306–07.

720. *Id.*

721. *Id.* at 1307.

722. 783 F.3d 1365, 1372 (Fed. Cir. 2015).

was the basis of demand.⁷²³ But other damages evidence precluded a grant of summary judgment for lack of damages evidence, including deposition testimony by the defendant's expert that appropriate royalties would be one or two percent, a license to the patent-in-suit, and the profitability of the accused systems.⁷²⁴ The decision is thus a reminder to defendants that any damages estimate they submit becomes the new floor for damages.⁷²⁵ A defendant should consider whether it is safer to have its expert critique the plaintiff's theory but not offer his own counter-estimate.

Taken together, these cases are part of a larger, more moderate strain of damages law that has emerged from the Federal Circuit after the more aggressive decisions⁷²⁶ in prior years. The court's shift may be the result of better prepared patentees, who are putting more thought and rigor into their damages models. The Federal Circuit also seems to recognize the practical difficulties that can be involved with proving damages and, therefore, will approve the use of many types of evidence, so long as it is actually tied to the patent's value. The court still insists, however, that the patentee not inflate its damages number by relying on improper considerations (e.g., the value from practicing a standard, or from non-infringing sales). It is thus striking a proper balance in its case-by-case assessment of reasonable royalty awards.

B. *Lost Profits*

In contrast to its relatively deferential review of royalty awards, the Federal Circuit set aside large jury verdicts in two lost profits cases. The first, *Warsaw Orthopedic, Inc. v. NuVasive, Inc.*,⁷²⁷ presented two issues—(1) a patentee's attempt to recover money transferred to it by related entities, who supposedly lost sales, and (2) a patentee's attempt to recover convoyed sales on unpatented products that it said were "functionally related" to the patented products.⁷²⁸ Each point is addressed separately below.

723. *Id.* at 1371.

724. *Id.* at 1372.

725. *Id.*

726. See, e.g., *Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292 (Fed. Cir. 2011); *Wordtech Sys., Inc. v. Integrated Networks Sols., Inc.*, 609 F.3d 1308 (Fed. Cir. 2010); *ResQNet.com v. Lansa, Inc.*, 594 F.3d 860 (Fed. Cir. 2010) (per curiam); *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301 (Fed. Cir. 2009).

727. 778 F.3d 1365 (Fed. Cir. 2015), *vacated sub nom. on another issue*, *Medtronic Sofamor Danek USA, Inc. v. NuVasive, Inc.*, 136 S. Ct. 893 (2016) (mem.).

728. *Id.* at 1373–75.

Prior Federal Circuit precedent prevented patentees from collecting the lost profits of their related companies.⁷²⁹ Here, Warsaw and its corporate parent, Medtronic, Inc., tried to circumvent this by setting up a web of contracts, whereby Warsaw received transfer payments and royalties from other Medtronic entities that sold products to hospitals and customers.⁷³⁰ Warsaw argued that the infringement caused those other entities to sell fewer products, which, in turn, diminished Warsaw's transfer payments.⁷³¹ The Federal Circuit rejected this argument, noting that Warsaw was not entitled to "lost profit[s]" in circumstances where it was not selling any products, especially where some payments were not specific to the products at issue or the patented technology, but were instead on a company-by-company basis.⁷³²

As for convoyed sales, the Federal Circuit held that Warsaw could not recover lost profits for sales of unpatented rods and screws that were sometimes used in spinal "fixation" systems along with the patented spinal implants because the products were not "functionally related" to each other.⁷³³ Warsaw's sales brochures showed that they were sold together mostly for convenience, which was insufficient under relevant precedent.⁷³⁴ In addition, "Warsaw never presented testimony that the fixations it sold to [related entity Medtronic Sofamor] had no independent function—that is, that they would not work as well in other surgeries not involving the patented technologies."⁷³⁵

The other case, *WesternGeco L.L.C. v. ION Geophysical Corp.*,⁷³⁶ held that a plaintiff who proved infringement under § 271(f) was not entitled to lost profits on components that were made in the United States but exported and used abroad.⁷³⁷ The majority determined

729. See, e.g., *Spine Sols., Inc. v. Medtronic Sofamor Danek USA, Inc.*, 620 F.3d 1305, 1319 (Fed. Cir. 2010) (holding that a patentee, not its subsidiary, must have sold the products in question to have standing to recover profits lost due to infringing sales); *Mars, Inc. v. Coin Acceptors, Inc.*, 527 F.3d 1359, 1362 (Fed. Cir. 2008) (holding that Mars was barred from recovering lost profits as a result of lost sales of its subsidiary); *Poly-America, L.P. v. GSE Lining Tech., Inc.*, 383 F.3d 1303, 1305 (Fed. Cir. 2004) (holding that a corporation was barred from incorporating the claim of a related entity into its damages calculation for lost profits).

730. *Warsaw*, 778 F.3d at 1376–77.

731. *Id.* at 1375–76.

732. *Id.* at 1376.

733. *Id.* at 1375–76.

734. *Id.*

735. *Id.*

736. 791 F.3d 1340, *reh'g en banc denied*, 621 F. App'x 663 (Fed. Cir. 2015) (per curiam), *petition for cert. filed*, 84 U.S.L.W. 3502 (U.S. Feb. 26, 2016) (No. 15-1085).

737. *Id.* at 1349–51.

that *Power Integrations, Inc. v. Fairchild Semiconductor International, Inc.*,⁷³⁸ which had rejected a similar lost profits theory for § 271(a) infringement,⁷³⁹ barred recovery here.⁷⁴⁰ The majority found no distinction between § 271(a) and § 271(f) for purposes of lost profits:

WesternGeco's argument misunderstands the role of § 271(f) in our patent law. Section 271(f) does not eliminate the presumption against extraterritoriality. Instead, it creates a limited exception. As we have discussed, by its terms, § 271(f) operates to attach liability to domestic entities who export components they know and intend to be combined in a would-be infringing manner abroad. But the liability attaches in the United States. It is the act of exporting the components from the United States which creates the liability. A construction that would allow recovery of foreign profits would make § 271(f), relating to components, broader than § 271(a), which covers finished products. In fact, § 271(f) was designed to put domestic entities who export components to be assembled into a final product in a similar position to domestic manufacturers who sell the final product domestically or export the final product. Just as the United States seller or exporter of a final product cannot be liable for use abroad, so too the United States exporter of the component parts cannot be liable for use of the infringing article abroad.⁷⁴¹

Neither Supreme Court authority nor other damages principles required a different result. Prior Supreme Court cases simply permitted damages on profits for foreign sales of a U.S.-manufactured item, not damages on subsequent foreign use.⁷⁴² Moreover, no precedent suggested that foreign sales could be recovered as "conveyed sales," and the patentee had not argued that point.⁷⁴³

Judge Evan Wallach dissented, arguing that some extraterritorial conduct may be relevant to damages, even if it does not constitute infringement.⁷⁴⁴ He pointed to the Supreme Court's decisions in *Manufacturing Co. v. Cowing*⁷⁴⁵ and *Dowagiac Manufacturing Co. v.*

738. 711 F.3d 1348 (Fed. Cir. 2013).

739. *Id.* at 1371–72.

740. *WesternGeco*, 791 F.3d at 1350–51 ("Under *Power Integrations*, WesternGeco cannot recover lost profits resulting from its failure to win foreign service contracts, the failure of which allegedly resulted from ION's supplying infringing products to WesternGeco's competitors.").

741. *Id.* at 1351 (citation omitted).

742. *Id.* at 1351–52.

743. *Id.* at 1352.

744. *Id.* at 1354 (Wallach, J., dissenting in part).

745. 105 U.S. 253 (1881).

*Minnesota Moline Plow Co.*⁷⁴⁶ to argue that lost profits on foreign sales are recoverable where the product is made in the United States.⁷⁴⁷ He also noted precedent where domestic sales of a product were used as a proxy for damages from U.S. infringement for a method claim.⁷⁴⁸ He saw no relevant difference because the doctrine of “convoyed sales” would allow for recovery of non-patented items that were integral to the patented method.⁷⁴⁹ Nor did it matter that the end sales here were made by a downstream customer (rather than the defendant) because competition still inflicted the same harm on the plaintiff.⁷⁵⁰ He would distinguish *Power Integrations* because there was a supposedly “tenuous connection between infringement and harm” there, which Judge Wallach did not think existed in *WesternGeco*, and because the infringement here occurred on the high seas, meaning the plaintiff could not have obtained patent protection from another jurisdiction to cover it.⁷⁵¹ He dismissed the majority’s discussion of § 271(f) as irrelevant because the defendant had been found liable for infringement and the question here simply regarded damages; it thus did not matter whether the use of the components was infringing.⁷⁵²

The full court subsequently denied a petition for rehearing en banc, with Judge Wallach again dissenting, this time joined by Judges Newman and Reyna.⁷⁵³ He wrote to make one additional point—namely, that the panel’s decision conflicted with copyright’s “predicate act” doctrine, which holds that a plaintiff may collect damages flowing from the extraterritorial exploitation of domestic infringement.⁷⁵⁴

As a matter of first principles, Judge Wallach’s view seems correct. If the defendant’s U.S. infringement actually and foreseeably damaged the plaintiff abroad, then § 284’s requirement that the

746. 235 U.S. 641 (1915).

747. *WesternGeco*, 791 F.3d at 1356 (Wallach, J., dissenting).

748. *Id.* at 1357 (noting that in *State Industries, Inc. v. Mor-Flo Industries, Inc.*, 883 F.2d 1573, 1575 (Fed. Cir. 1989), the Federal Circuit considered the profit loss resulting from the non-infringing domestic sales in its damages calculations).

749. *Id.* at 1357–58.

750. *Id.* at 1358–59.

751. *Id.* at 1360–61.

752. *Id.* at 1361–63.

753. *WesternGeco L.L.C. v. ION Geophysical Corp.*, 621 F. App’x 663 (Fed. Cir. 2015) (per curiam).

754. *Id.* at 664 (Wallach, J., dissenting) (citing *Tire Eng’g & Distrib., LLC v. Shandong Linglong Rubber Co.*, 682 F.3d 292, 306–07 (4th Cir. 2012) (per curiam); *L.A. News Serv. v. Reuters Television Int’l, Ltd.*, 149 F.3d 987, 991–92 (9th Cir. 1998); *Update Art, Inc. v. Modiin Publ’g, Ltd.*, 843 F.2d 67, 73 (2d Cir. 1988); *Sheldon v. Metro-Goldwyn Pictures Corp.*, 106 F.2d 45, 48, 48–49 (2d Cir. 1939)).

patentee be awarded “damages adequate to compensate for the infringement,”⁷⁵⁵ should cover those damages. To permit anything less denies the patentee full compensation under the statute. It should not matter whether the foreign conduct infringes—patentees can recover lost profits on non-infringing “convoyed sales” that would not have been made without the infringement.⁷⁵⁶ There is no reason to treat sales that do not infringe because they were made abroad any differently.

Nevertheless, *Power Integrations* resolved all these issues against the patentee, meaning that absent en banc or Supreme Court review, *WesternGeco* could not have come out any other way. Judge Wallach’s attempt to distinguish *Power Integrations* was unconvincing because it was undisputed in *Power Integrations* that the defendant’s U.S. infringement had caused the plaintiff to lose sales all over the world.⁷⁵⁷ Although not mentioned in the *Power Integrations* opinion, it was undisputed that customers there would not have bought a single power chip from the defendant if they were not able to import them into the United States, because they did not want to be hassled in trying to segregate which end-products containing the infringing chips could enter the United States.⁷⁵⁸ The causal connection between the U.S. infringement and the foreign lost sales was as strong in *Power Integrations* as it was in *WesternGeco*.

The Federal Circuit also considered two other lost profits cases in which it affirmed more garden-variety calculations. In the first, *Apple Inc. v. Samsung Electronics Co.*,⁷⁵⁹ one issue on appeal was whether substantial evidence supported the jury’s finding of a lack of non-infringing substitutes.⁷⁶⁰ The defendant’s arguments were insufficient because it relied only on the “mere existence” of its other

755. 35 U.S.C. § 284 (2012) (“Upon finding for the claimant the court shall award the claimant damages adequate to compensate for the infringement.”).

756. *WesternGeco*, 791 F.3d at 1358 (Wallach, J., dissenting).

757. *Power Integrations, Inc. v. Fairchild Semiconductor Int’l, Inc.*, 711 F.3d 1348, 1371 (Fed. Cir. 2013).

758. Joint Appendix Vol. 2 at 5010–11, 5303–04, *Power Integrations, Inc. v. Fairchild Semiconductor Int’l, Inc.*, 711 F.3d 1348 (Fed. Cir. 2013) (No. 04-CV-1371); Joint Appendix Vol. 3 at 5429–30, 5442–44, 5500–01, *Power Integrations, Inc. v. Fairchild Semiconductor Int’l, Inc.*, 711 F.3d 1348 (Fed. Cir. 2013) (No. 04-CV-1371).

759. 786 F.3d 983 (Fed. Cir. 2015), *cert. granted*, 84 U.S.L.W. 3350 (U.S. Mar. 21, 2016) (No. 15-777).

760. *Id.* at 1004. The Federal Circuit also affirmed the jury’s reasonable royalty calculation because the plaintiff’s expert testimony on the “demand” element of lost profits was equally applicable to the reasonable royalty analysis under *Georgia-Pacific*, and the expert was not required to repeat her testimony when explaining the royalty rate. *Id.* at 1004–05.

non-infringing phones without showing that they had a feature similar to the patented feature or would have otherwise been acceptable to customers.⁷⁶¹ By contrast, the plaintiff showed that one phone had markedly different features (e.g., a slide-out keyboard and lower resolution screen), while the other phone had never been sold to a U.S. carrier.⁷⁶²

In the second case, *Akamai Technologies, Inc. v. Limelight Networks, Inc.*, the court rejected a challenge to the proof of causation between the plaintiff's lost sales and the infringement.⁷⁶³ The defendant argued that the large price disparity between its products (and its customers' preference for lower priced goods) precluded any finding that the plaintiff would have captured those sales without the infringement.⁷⁶⁴ But the plaintiff's expert presented sufficient evidence that demand for the products was relatively "inelastic," i.e., price insensitive, and he accounted for any elasticity by assuming that the plaintiff would capture only seventy-five percent of the defendant's sales.⁷⁶⁵ Substantial evidence thus supported the jury's verdict.

The takeaway common to all four cases, then, is that a factual attack on a jury verdict, as in *Apple* and *Akamai*, is far less likely to succeed than legal challenges to an entire category of damages, as in *Warsaw* and *WesternGeco*.

C. Attorney Fees

The main question regarding attorney fee awards in 2015 was what impact, if any, the Supreme Court's decisions in *Octane Fitness, LLC v. Icon Health & Fitness, Inc.*⁷⁶⁶ and *Highmark Inc. v. Allcare Health Management System, Inc.*⁷⁶⁷ would have on the imposition and review of fees. *Octane* held that an "exceptional" case, which may justify an award of attorney fees under 35 U.S.C. § 285, "is simply one that stands out from others with respect to the substantive strength of a party's litigating position (considering both the governing law and the facts of the case) or the unreasonable manner in which the case was litigated."⁷⁶⁸ *Highmark* held that the district court's decision must

761. *Id.* at 1004.

762. *Id.*

763. 805 F.3d 1368, 1372 (Fed. Cir. 2015), *petition for cert. filed*, 84 U.S.L.W. 3437 (U.S. Jan. 26, 2016) (No. 15-993).

764. *Id.* at 1379–81.

765. *Id.* at 1380.

766. 134 S. Ct. 1749 (2014).

767. 134 S. Ct. 1744 (2014).

768. *Octane*, 134 S. Ct. at 1756.

be reviewed for abuse of discretion (not de novo), although it added that a court “necessarily abuse[s] its discretion if it base[s] its ruling on an erroneous view of the law or on a clearly erroneous assessment of the evidence.”⁷⁶⁹ The Federal Circuit issued three precedential decisions applying these new standards. Two reversed denials of fees where the district court decision was inadequately explained or unsupported, while the third affirmed a denial of fees and treated the district court’s opinion much more deferentially.

The first, *Oplus Technologies, Ltd. v. Vizio, Inc.*,⁷⁷⁰ vacated and remanded a pre-*Octane* fee denial to allow the district court to reconsider in light of the new law.⁷⁷¹ The district court’s opinion was odd because it found the case exceptional and detailed “an egregious pattern of misconduct,” yet declined to impose any fees.⁷⁷² The panel first noted that *Octane* “lowers considerably the standard for awarding fees,” and then vacated because “nothing in the opinion or in the record substantiates the court’s decision not to award fees.”⁷⁷³ The plaintiff’s conduct likely significantly drove up costs—it was constantly shifting positions and filed numerous unsupported motions to compel—and the district court found its behavior “inappropriate,” “unprofessional,” “vexatious,” and “harassing.”⁷⁷⁴ The district court suggested that the defendant caused delay too, but it identified nothing specific, and the Federal Circuit could not determine what delaying tactics the defendant may have taken.⁷⁷⁵ “Although the award of fees is clearly within the discretion of the district court, when, as here, a court finds litigation misconduct and that a case is exceptional, the court must articulate the reasons for its fee decision.”⁷⁷⁶

Another decision, *Gaymar Industries, Inc. v. Cincinnati Sub-Zero Products, Inc.*,⁷⁷⁷ also reversed a denial of fees where the district court had relied in part on alleged misconduct by the party seeking fees.⁷⁷⁸ Here, the district court had given four examples of statements that supposedly showed that the defendant (who was seeking fees) “[did]

769. *Highmark*, 134 S. Ct. at 1748 & n.2.

770. 782 F.3d 1371 (Fed. Cir. 2015).

771. *Id.* at 1374–75.

772. *Id.* at 1373–74.

773. *Id.* at 1374.

774. *Id.*

775. *Id.* at 1375.

776. *Id.* at 1375–76.

777. 790 F.3d 1369 (Fed. Cir. 2015).

778. *Id.* at 1377.

not have ‘clean hands.’”⁷⁷⁹ The Federal Circuit acknowledged that the movant’s conduct could be relevant to fees, but found clear error in each of the district court’s four findings of alleged misconduct by the movant.⁷⁸⁰ Although those four examples involved “overstatements,” none “amount[ed] to misrepresentation or litigation misconduct.”⁷⁸¹ Indeed, “other circuits have concluded that isolated overstatements do not rise to the level of sanctionable litigation misconduct under Federal Rule of Civil Procedure 11.”⁷⁸² Because the district court’s fee denial had been based on these alleged misstatements, the Federal Circuit vacated and remanded, while leaving open the possibility that the fee motion could be denied on other grounds, such as the strength of the plaintiff’s litigation positions.⁷⁸³

The third decision, *SFA Systems, LLC v. Newegg, Inc.*,⁷⁸⁴ affirmed a denial of fees.⁷⁸⁵ The plaintiff had filed two suits against multiple defendants and settled with everyone but defendant Newegg.⁷⁸⁶ The plaintiff prevailed on claim construction and indefiniteness, yet it voluntarily dropped the suit before trial.⁷⁸⁷ The defendant then moved for fees, arguing that the plaintiff’s litigation positions were unreasonable and that it had filed suit for the improper purpose of extracting a nuisance settlement.⁷⁸⁸ The district court rejected both arguments, and the Federal Circuit found no abuse of discretion.⁷⁸⁹

On the first point, the Federal Circuit refused to review the legal issues of claim construction and indefiniteness de novo, and concluded that *Highmark*’s footnote two did not require them to.⁷⁹⁰ The court explained that the task on appeal was to assess the “strength”⁷⁹¹ of the plaintiff’s positions, not their “correctness”:

779. *Id.* at 1373–76.

780. *Id.* at 1373–77.

781. *Id.* at 1376.

782. *Id.*

783. *Id.* at 1377.

784. 793 F.3d 1344 (Fed. Cir. 2015).

785. *See id.* at 1352.

786. *Id.* at 1345–46.

787. *Id.* at 1346 (stating that the plaintiff had filed a motion to dismiss, which the district court granted).

788. *Id.* at 1346–47.

789. *Id.* at 1346–49, 1352.

790. *Id.* at 1347–48.

791. *Id.* at 1348 (quoting *Octane Fitness, LLC v. ICON Health & Fitness, Inc.*, 134 S. Ct. 1749, 1756 (2014)).

Importantly, this means that we need not rule on the *correctness* of the district court's decision on all underlying issues of law in reviewing a district court's exceptional case determination. We need only determine whether the district court abused its discretion when it found that the party's litigating position was not so merit-less as to "stand out" from the norm and, thus, be exceptional.⁷⁹²

The court is certainly correct to distinguish between "strength" and "correctness," but it is difficult to understand why that has any bearing on the standard of review. The strength of a party's position on an issue of law is every bit as much of a legal judgment as the correctness of that position. Regardless, the Federal Circuit concluded that the district court did not abuse its discretion because it reasonably considered both issues, and "there is nothing in the district court's summary judgment ruling to indicate the court gave Newegg's arguments scant attention or that its denial of summary judgment was predicated on an institutional bias against granting such requests."⁷⁹³

The court also found no abuse of discretion regarding the second point. The panel agreed that "a pattern of litigation abuses characterized by the repeated filing of patent infringement actions for the sole purpose of forcing settlements, with no intention of testing the merits of one's claims, is relevant," and that it would be wrong to "discount the motivations behind a patentee's litigation history."⁷⁹⁴ But the record did not show evidence of such conduct. Evidence that the plaintiff filed many suits and settled many of them for less than the costs of litigation did not necessarily suggest that the plaintiff filed this suit to extract a nuisance settlement.⁷⁹⁵ The plaintiff had continued to pursue another case against a larger defendant with no guarantee of settlement, and it had settled cases on other patents for larger sums.⁷⁹⁶ The district court, which was best positioned to assess the facts, thus did not abuse its discretion in finding the evidence here insufficient.

D. Enhanced Damages

This year's enhanced damages jurisprudence culminated with the Supreme Court granting certiorari in two cases—*Halo Electronics, Inc. v. Pulse Electronics, Inc.*⁷⁹⁷ and *Stryker Corp. v. Zimmer Inc.*⁷⁹⁸—to reassess the

792. *Id.*

793. *Id.* at 1349.

794. *Id.* at 1350.

795. *Id.* at 1347, 1349, 1351.

796. *Id.* at 1351.

797. 136 S. Ct. 356 (2015).

Federal Circuit's current standard. The panel decisions in *Halo* and *Stryker* were in 2014, but the full court denied rehearing en banc in 2015, so it is worth discussing those denials, along with the court's other 2015 enhanced damages decisions.⁷⁹⁹ But, first, some general background on the enhanced damages inquiry will help put things into context.

The Federal Circuit's current § 284 jurisprudence stems from *In re Seagate Technology, LLC*,⁸⁰⁰ which held that a finding of willful infringement is a necessary prerequisite to enhancement, and then equated willful infringement with "objective recklessness," and set forth a two-prong test: (1) "the infringer acted despite an objectively high likelihood that its actions constituted infringement of a valid patent," and (2) "this objectively-defined risk (determined by the record developed in the infringement proceeding) was either known or so obvious that it should have been known to the accused infringer."⁸⁰¹ *Seagate* added that "[t]he state of mind of the accused infringer is not relevant" to the first prong.⁸⁰² Subsequent cases held that the objective prong was not met when the infringer presented a reasonable trial defense.⁸⁰³ *Halo* presented a further twist because it set aside a jury's willfulness finding where the infringer had no good faith defense pre-suit, but developed a non-sham trial defense after being sued.⁸⁰⁴ Other precedent also held that the objective prong was a pure legal issue for the judge, reviewable de novo on appeal.⁸⁰⁵

Intervening Supreme Court authority called this approach into doubt. *Octane* and *Highmark*, which interpreted the attorney fee provision of § 285, jettisoned a similar two-prong test and determined de

798. *Id.*

799. *Stryker Corp. v. Zimmer, Inc.*, 774 F.3d 1349 (Fed. Cir. 2014), *withdrawn and revised by* 782 F.3d 649 (Fed. Cir. 2015), *reh'g denied*, 596 F. App'x 924 (Fed. Cir.), *cert. granted*, 136 S. Ct. 356 (2015); *Halo Elecs., Inc. v. Pulse Elecs., Inc.*, 769 F.3d 1371 (Fed. Cir. 2014), *reh'g denied*, 780 F.3d 1357, 1358 (Fed. Cir. 2015), *cert. granted*, 136 S. Ct. 356 (2015).

800. 497 F.3d 1360 (Fed. Cir. 2007) (en banc).

801. *Id.* at 1371.

802. *Id.*

803. *Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1310–11 (Fed. Cir. 2011); *Spine Sols., Inc. v. Medtronic Sofamor Danek USA, Inc.*, 620 F.3d 1305, 1319 (Fed. Cir. 2010).

804. *Halo*, 769 F.3d at 1376–77, 1382–83.

805. *Stryker Corp. v. Zimmer, Inc.*, 782 F.3d 649, 654 (Fed. Cir.), *cert. granted*, 136 S. Ct. 356 (2015); *Bard Peripheral Vascular, Inc. v. W.L. Gore & Assocs., Inc. (Bard I)*, 682 F.3d 1003, 1005–07 (Fed. Cir. 2012).

novo review as inconsistent with the statutory test.⁸⁰⁶ The text of § 284’s enhanced damages provision mirrors that of § 285, as shown below:

35 U.S.C. § 284	35 U.S.C. § 285
“[T]he court may increase the damages up to three times the amount found or assessed.” ⁸⁰⁷	“The court in exceptional cases may award reasonable attorney fees to the prevailing party.” ⁸⁰⁸

The question is whether *Octane* and *Highmark* require setting aside the rigid *Seagate* standard and adopting a more flexible standard for enhanced damages.

Halo’s petition for rehearing en banc argued that they do,⁸⁰⁹ but the Federal Circuit denied review.⁸¹⁰ Judge Richard G. Taranto, joined by Judge Reyna, thought that the court’s enhanced damages jurisprudence may well require revision in the future, but did not believe that *Halo* was the proper vehicle to do it.⁸¹¹ Judge O’Malley, joined by Judge Hughes, dissented, arguing that *Octane* and *Highmark* required eliminating the two-prong *Seagate* test.⁸¹² They began by noting the parallel between § 284 and § 285:

Our current two-prong, objective/subjective test for willful infringement, set out in *In re Seagate Technology, LLC* and further explained in *Bard Peripheral Vascular, Inc. v. W.L. Gore & Assocs, Inc.*, is analogous to the test this court proscribed for the award of attorney fees under § 285 in *Brooks Furniture Manufacturing, Inc. v. Dutailier International, Inc.* The parallel between our tests for these two issues is not surprising. Both enhanced damages and attorney fees are authorized under similar provisions in title 35⁸¹³

They then urged their colleagues to reconsider the issue en banc because nothing in § 284’s text supports the application of a rigid,

806. *Highmark Inc. v. Allcare Health Mgmt. Sys., Inc.*, 134 S. Ct. 1744, 1748–49 (2014); *Octane Fitness, LLC v. ICON Health & Fitness, Inc.*, 134 S. Ct. 1749, at 1755–57 (2014).

807. 35 U.S.C. § 284, para. 2 (2012).

808. *Id.* § 285.

809. *Halo Elecs., Inc. v. Pulse Elecs., Inc.*, 780 F.3d 1357, 1363 (Fed. Cir. 2015) (per curiam) (Taranto, J., concurring).

810. *Id.* at 1358 (majority opinion).

811. *Id.* at 1359–60 (Taranto, J., concurring).

812. *Id.* at 1361–62 (O’Malley, J., dissenting).

813. *Id.* at 1361 (citations omitted).

two-prong test, just as *Octane* held that § 285 did not justify use of the two-prong test for attorney fees:

Because we now know that we were reading *PRE* [the Federal Circuit's source for the two-prong attorney fee test] too broadly, and have been told to focus on the governing statutory authorization to determine what standards should govern an award of attorney[] fees, we should reconsider whether those same interpretative errors have led us astray in our application of the authority granted to district courts under § 284. Just as "the *PRE* standard finds no roots in the text of § 285," there is nothing in the text of § 284 that justifies the use of the *PRE* narrow standard. In rejecting the rigid two-prong, subjective/objective test for § 285 under *Brooks Furniture*, moreover, the Supreme Court told us to employ a flexible totality of the circumstances test. . . . We should now assess whether a flexible test similar to what we have been told to apply in the § 285 context is also appropriate for an award of enhanced damages.⁸¹⁴

In particular, Judges O'Malley and Hughes were troubled by the fact that *Seagate* "require[s] that an evidentiary wall be erected between the objective and subjective portions of the inquiry," which "preclude[s] considerations of subjective bad faith—no matter how egregious—from informing our inquiry," of the "objective" prong.⁸¹⁵

Judge O'Malley also urged for an en banc reconsideration of several other issues related to enhanced damages, including the de novo standard of review, the clear and convincing evidence burden of proof, and the submission of part of the inquiry to juries, even though § 284 simply refers to "the court" deciding whether to enhance damages.⁸¹⁶

The full court also denied en banc review in *Stryker* the same day, with the panel simply amending its opinion to add a footnote leaving open the possibility that it might change its standard of review in a future case, but that it was unnecessary to do so in *Stryker*:

This court has not yet addressed whether *Octane Fitness, LLC v. ICON Health & Fitness, Inc.* or *Highmark Inc. v. All-care Health [Management Systems], Inc.* altered the standard of review under which this court analyzes the objective prong of willfulness. However, as the district court failed to undertake any objective assessment of Zimmer's specific defenses, the district court erred under any standard of review and thus this court need not now

814. *Id.* at 1362–63 (citations omitted).

815. *Id.* at 1362.

816. 35 U.S.C. § 284 (2012); *Halo*, 780 F.3d at 1363–64 (O'Malley, J., dissenting).

address what standard of review is proper regarding the objective prong of willfulness.⁸¹⁷

This seemed an odd way to resolve the issue, though, because, if the standard of review were abuse of discretion, one would have thought that the panel would need to vacate and remand the willfulness finding with instructions for the district court to address all the facts in the first instance, rather than simply reversing outright without giving the district court a chance to exercise any discretion.

The Federal Circuit addressed a few other cases in 2015 raising similar issues. For example, *Bard Peripheral Vascular, Inc. v. W.L. Gore & Associates, Inc.*⁸¹⁸ reflected continuing uncertainty about the appropriate standard of appellate review.⁸¹⁹ The decision was a follow-on from a prior 2012 decision, where the Federal Circuit vacated a decision that enhanced damages and remanded for the district judge to consider whether Gore's defenses were reasonable under the objective prong.⁸²⁰ Ultimately, the district judge found that the defenses were not reasonable and reaffirmed the enhancement.⁸²¹

On appeal, the panel conducted de novo review of the objective prong and affirmed the enhancement.⁸²² The panel initially held that the mere fact that one Federal Circuit judge had previously dissented on the merits did not necessarily mean that Gore's position was reasonable.⁸²³ It then noted that this was an "unusual case" because Gore had initially sought a patent on the disputed subject matter, but later turned around and argued Bard's patent on the same invention was anticipated or obvious, and it made arguments about joint inventorship that were barred by the result of a prior interference.⁸²⁴ The implication is that, although the panel was affirming enhancement here, this should not be taken as a sign that the Federal Circuit was loosening the *Seagate* standard. Judge Hughes concurred, adding that although he agreed that Gore should lose under de novo review, he also thought that *Highmark* required abuse of discretion review, which would further tilt the scales against

817. *Stryker Corp. v. Zimmer, Inc.*, 782 F.3d 649, 661 n.6 (Fed. Cir. 2015) (citations omitted), *reh'g denied*, 596 F. App'x. 924 (Fed. Cir.), *cert. granted*, 136 S. Ct. 356 (2015).

818. *Bard II*, 776 F.3d 837 (Fed. Cir. 2015).

819. *Id.* at 848 (Hughes, J., concurring).

820. *Bard I*, 682 F.3d 1003, 1005–09 (Fed. Cir. 2012), *aff'd*, 776 F.3d 837 (Fed. Cir. 2015).

821. *Bard Peripheral Vascular, Inc. v. W.L. Gore & Assocs., Inc.*, No. CV 03-0597-PHX-MHM, 2013 WL 5670909, at *2, *7, *12 (D. Ariz. Oct. 17, 2013).

822. *Bard II*, 776 F.3d at 844, 847.

823. *Id.* at 845.

824. *Id.* at 847.

Gore.⁸²⁵ Judge Newman dissented, arguing that Gore's joint inventorship defense was reasonable and that, regardless, of whether the infringement was willful, a doubling of damages was untenable given the district court's finding that it was in the public interest for Gore to continue selling its medical devices.⁸²⁶

The other case, *Carnegie Mellon University v. Marvell Technology Group, Ltd.*, solidified the court's position that a reasonable trial defense, even if developed for the first time post-suit, is a per se bar to enhancing damages.⁸²⁷ The panel concluded that, although the defendant had not raised a good faith non-infringement position, its invalidity defenses were reasonable because there was "enough uncertainty" about what the prior art disclosed and the scope of the claims.⁸²⁸ The district court had concluded that, despite these defenses, Marvell was still a willful infringer during the pre-suit period because it had not relied on them then.⁸²⁹ But the panel rejected this argument, explaining that "we have repeatedly assessed objective reasonableness of a defense without requiring that the infringer had the defense in mind before the litigation," citing *Halo* and other cases.⁸³⁰

Finally, *WesternGeco L.L.C. v. ION Geophysical Corp.* affirmed a decision refusing to enhance damages because the objective prong was not met.⁸³¹ The plaintiff barely tried to argue on appeal that the defenses were unreasonable, and instead focused attention on the fact that the defenses did not succeed or that the defendant did not pursue them all on appeal.⁸³² Moreover, evidence that customers brought the patents to the defendant's attention, yet the defendant was so concerned about infringement that it avoided entering into indemnification agreements, was irrelevant to the objective prong.⁸³³

825. *Id.* at 847–48 (Hughes, J., concurring).

826. *Id.* at 853–54 (Newman, J., dissenting).

827. 807 F.3d 1283, 1299–1302 (Fed. Cir. 2015), *reh'g denied*, 805 F.3d 1382 (Fed. Cir. 2015).

828. *Id.* at 1301.

829. *Id.*

830. *Id.*

831. 791 F.3d 1340, 1344, 1354 (Fed. Cir. 2015), *reh'g denied*, 621 F. App'x 663 (2015), *petition for cert. filed*, 84 U.S.L.W. 3502 (U.S. Feb. 26, 2016) (No. 15-1085).

832. *Id.* at 1354 (explaining that unreasonableness determines whether to enhance damages rather than the success of the defense).

833. *Id.*

As noted above, the Supreme Court subsequently granted certiorari in *Halo* and *Stryker*.⁸³⁴ The Court consolidated the cases and heard the argument on February 23, 2016, meaning a decision will issue before the end of the term in June. This prompted the Federal Circuit to subsequently hold Carnegie Mellon's petition for rehearing on enhancement until after the Supreme Court's decision.⁸³⁵ This decision may, thus, significantly alter the framework for enhancing damages under § 284.

E. Design Patents

Design patent suits may be increasingly attractive after two Federal Circuit decisions on damages. The first, *Apple Inc. v. Samsung Electronics, Co.*, held that a patentee is entitled to recover *all* the infringer's profits from infringing products without attempting to apportion what amount is attributable to use of the patented design.⁸³⁶ The court's holding was based on the plain language of 35 U.S.C. § 289, which entitles a design patent holder to a total disgorgement of the defendant's profits on the infringing product:

Whoever during the term of a patent for a design, without license of the owner, (1) applies the patented design, or any colorable imitation thereof, to any article of manufacture for the purpose of sale, or (2) sells or exposes for sale any article of manufacture to which such design or colorable imitation has been applied *shall be liable to the owner to the extent of his total profit*, but not less than \$250, recoverable in any United States district court having jurisdiction of the parties.⁸³⁷

The statutory term "article of manufacture" referred to the end-product as sold, i.e., the entire phone and not its "innards," which are not sold separately.⁸³⁸ It therefore did not matter whether the alleged infringement caused any of the accused phone sales or profits.⁸³⁹ Although this conclusion seems straight-forward, the Supreme Court subsequently granted *certiorari* to review it and will hear argument in the October 2016 term.

834. *Halo Elecs., Inc. v. Pulse Elecs., Inc.*, 136 S. Ct. 356 (2015); *Stryker Corp. v. Zimmer, Inc.*, 136 S. Ct. 356 (2015).

835. *Carnegie Mellon Univ. v. Marvell Tech. Grp., Ltd.*, 805 F.3d 1382, 1382–83 (Fed. Cir. 2015).

836. 786 F.3d 983, 998, 1001–02 (Fed. Cir. 2015), *cert. granted in part*, *Samsung Elecs. Co. v. Apple Inc.*, 136 S. Ct. 1453 (2016).

837. 35 U.S.C. § 289 (2012) (emphasis added).

838. *Apple*, 786 F.3d at 1001–02.

839. *Id.*

The other case, *Nordock, Inc. v. Systems, Inc.*,⁸⁴⁰ reversed a damages judgment that did not award the patentee all the infringer's profits.⁸⁴¹ The defendant had urged the jury to calculate damages based on the alleged "cost savings" from using the patented design and argued that there was no evidence it actually made any profits on them.⁸⁴² The Federal Circuit held that the "cost savings" methodology was improper because it relied on the same apportionment-type principles that were barred by the statutory language and *Apple*.⁸⁴³ Further, both parties' experts had presented evidence showing that the defendant's profits were somewhere between \$600,000 and \$912,000, while nothing supported the jury's award of \$0 in disgorgement.⁸⁴⁴ The case was thus remanded for a new trial on damages.⁸⁴⁵

Taken together, these cases demonstrate that design patent damages can be far different than the typical reasonable royalty calculation, especially given the statutory bar on apportionment. They make design patent suits an increasingly attractive option, especially where the product is complicated and the patentee would need to apportion to calculate damages from any utility patent infringement.

F. *Permanent Injunctions*

The Federal Circuit issued only one decision on injunctions this year, but it was an important one that should help patentees protect their rights against infringing direct competitors. Injunction law has been in flux since the Supreme Court's decision *eBay, Inc. v. MercExchange, LLC*⁸⁴⁶ instructed the lower courts that injunctions in patent cases are not automatic and that they must use the traditional four-factor test—namely, that a plaintiff must demonstrate (1) irreparable harm, (2) the inadequacy of legal remedies, such as damages, to compensate for that harm, (3) the balance of the hardships favors the plaintiff, and (4) an injunction would not disserve the public interest.⁸⁴⁷ Subsequent Federal Circuit precedent found these factors were met in competitor cases involving simpler

840. 803 F.3d 1344 (Fed. Cir. 2015), *petition for cert. filed*, 84 U.S.L.W. 3437 (U.S. Feb. 1, 2016) (No. 15-978).

841. *Id.* at 1355.

842. *Id.* at 1353–54.

843. *Id.* at 1354–55.

844. *Id.* at 1355–56.

845. *Id.* at 1355.

846. 547 U.S. 388 (2006).

847. *Id.* at 391.

products.⁸⁴⁸ But other precedent, including several prior *Apple/Samsung* decisions, stressed that, as part of the first prong, the plaintiff must prove a “causal nexus” between the alleged harm and the patented technology, as opposed to other parts of the accused product.⁸⁴⁹ That can get complicated when the patent covers one feature of a complex product, like a smartphone.

A split panel further clarified the “causal nexus” requirement in yet another iteration of *Apple, Inc. v. Samsung Electronics Co.*,⁸⁵⁰ vacating a denial of an injunction.⁸⁵¹ The patents in question covered three iPhone features—“slide to unlock,” spelling autocorrect, and the ability to recognize certain items in a text message, such as a phone number.⁸⁵² Apple sought a “feature-based” injunction, meaning that Apple wanted Samsung to simply remove these features, not to discontinue sale of the accused products entirely.⁸⁵³ The panel rejected Apple’s argument that the “causal nexus” requirement does not apply to feature-based injunctions, but also found that the district court applied too strict a requirement.⁸⁵⁴ In particular, the patentee can establish a “causal nexus” if the infringing feature “impacts customers’ purchasing decisions,” even if it is not the sole or even predominant basis for their decision:

[I]n a case involving phones with hundreds of thousands of available features, it was legal error for the district court to effectively require Apple to prove that the infringement was the sole cause of the lost downstream sales Instead, the district court should have considered whether there is “some connection” between the patented features and the demand for Samsung’s products.⁸⁵⁵

The majority then cited to evidence of Samsung’s monitoring and copying of the patented features, its internal documents suggesting

848. See, e.g., *Douglas Dynamics, LLC v. Buyers Prods. Co.*, 717 F.3d 1336, 1344–46 (Fed. Cir. 2013) (applying the four factor test before deciding that the plaintiff was entitled to a permanent injunction), *aff’d*, 628 F. App’x 767 (Fed. Cir. 2016); *Presidio Components, Inc. v. Am. Tech. Ceramics Corp.*, 702 F.3d 1351, 1362–64 (Fed. Cir. 2012) (same); *Apple, Inc. v. Samsung Elecs. Co. (Apple I)*, 678 F.3d 1314, 1332–33 (Fed. Cir. 2012) (same); *Robert Bosch LLC v. Pylon Mfg. Corp.*, 659 F.3d 1142, 1148, 1157 (Fed. Cir. 2011) (same).

849. See, e.g., *Apple Inc. v. Samsung Elecs. Co.*, 735 F.3d 1352, 1361, 1363–64 (Fed. Cir. 2013); *Apple Inc. v. Samsung Elecs. Co.*, 695 F.3d 1370, 1374–75 (Fed. Cir. 2012); *Apple I*, 678 F.3d at 1324.

850. 801 F.3d 1352 (Fed. Cir.), *modified on reh’g*, 809 F.3d 633 (Fed. Cir. 2015).

851. *Id.* at 1366.

852. *Id.* at 1356.

853. *Id.* at 1356, 1364.

854. *Id.* at 1358–60.

855. *Id.* at 1359–60 (citation omitted).

their value, and documents showing that users criticized other, non-infringing keyboards.⁸⁵⁶ Although copying may not always show a causal nexus, the evidence here tied Samsung's subjective belief about the features' importance to customer perceptions.⁸⁵⁷ Apple also presented a conjoint study suggesting that customers would not have purchased an accused product without the accused features and would pay considerably more for a phone with them.⁸⁵⁸

After again stressing that the infringing features need only be "important" to customers and not "the" reason they buy the infringing products, the majority held the causal nexus requirement satisfied as a matter of law:

The district court therefore erred as a matter of law when it required Apple to show that the infringing features were *the* reason why consumers purchased the accused products. Apple does not need to establish that these features are *the* reason customers bought Samsung phones instead of Apple phones—it is enough that Apple has shown that these features were related to infringement and were important to customers when they were examining their phone choices. On this record, applying the correct legal standard for irreparable harm, Apple has established irreparable harm. The strength of its evidence of irreparable harm goes to this factor's weight when assessing the propriety of the injunction.⁸⁵⁹

The majority reversed the district court on the second *eBay* factor for similar reasons,⁸⁶⁰ finding that Apple's available remedies at law (money damages) were inadequate because its damages were difficult to quantify.⁸⁶¹

On the other *eBay* factors, the majority affirmed the district court's decision that the balance of hardships and public interest favored an injunction.⁸⁶² With respect to the hardships, the injunction's narrow, feature-based prohibition strongly favored Apple, especially where "Samsung will suffer relatively little harm from Apple's injunction, while Apple is deprived of its exclusivity and forced to compete against its own innovation usurped by its largest and fiercest

856. *Id.* at 1361.

857. *Id.*

858. *Id.* at 1362.

859. *Id.*

860. *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 391 (2006) (stating that the second factor of the four-factor test requires the plaintiff to prove "that remedies available at law, such as monetary damages, are inadequate to compensate for that injury").

861. *Apple Inc.*, 801 F.3d at 1363.

862. *Id.* at 1363–65.

competitor.”⁸⁶³ As for the public interest, “the public generally does not benefit when that competition comes at the expense of a patentee’s investment-backed property right.”⁸⁶⁴ Instead, “the public interest nearly always weighs in favor of protecting property rights in the absence of countervailing factors, especially when the patentee practices his inventions.”⁸⁶⁵ Here, the injunction was narrowly tailored, and there was no life-saving drug at risk, so the public interest favored relief.⁸⁶⁶ The court thus remanded for entry of an injunction.⁸⁶⁷

Judge Reyna filed a concurring opinion, adding that he also thought an injunction was justified based on (1) the injury to Apple’s right to exclude, and (2) reputational harm to Apple absent an injunction.⁸⁶⁸ On the first point, Judge Reyna seemed to suggest that an injunction will always be appropriate in cases involving direct competitors because it is difficult to quantify the true value of excluding a competitor or the harm in allowing them to remain on the market.⁸⁶⁹ On the latter point, he noted that Apple’s reputation as an innovator was particularly important in the smartphone market.⁸⁷⁰ Although Apple had other licensing agreements, they included carve-outs to prevent others from creating “clones” of Apple’s phones and involved lesser competitors than Samsung; it was also unclear if those other licensees used the patented features at issue here.⁸⁷¹

Chief Judge Prost dissented, arguing that the district court did not commit legal error because it did not actually require a showing that the accused features were the “sole” or “predominant” reasons.⁸⁷² Instead, she believed the district court simply weighed the evidence and found the facts against Apple, which was not clear error.⁸⁷³ Chief Judge Prost also stressed that *eBay* cautioned against using a patentee’s statutory right to exclude as the sole basis to support an injunction, and that each case’s facts matter.⁸⁷⁴ Given the district court’s finding here, she did not believe an injunction was appropriate.⁸⁷⁵

863. *Id.* at 1364.

864. *Id.* at 1365.

865. *Id.*

866. *Id.*

867. *Id.* at 1366.

868. *Id.* at 1366–74 (Reyna, J., concurring).

869. *See id.* at 1370.

870. *Id.* at 1373.

871. *Id.* at 1374.

872. *Id.* at 1375–76 (Prost, C.J., dissenting).

873. *Id.* at 1376–77.

874. *Id.* at 1380–81.

875. *Id.* at 1381.

VII. PROCEDURAL ISSUES

A. Federal Jurisdiction

In 2015, the Federal Circuit dismissed two suits for lack of federal jurisdiction where they turned on state law claims.

The first, *NeuroRepair, Inc. v. Nath Law Group*,⁸⁷⁶ was a malpractice action against patent prosecutors.⁸⁷⁷ The Federal Circuit applied the new test from *Gunn v. Minton*,⁸⁷⁸ which allows federal jurisdiction over a state law claim, under 28 U.S.C. § 1338, in cases in which a patent law, or any federal, issue is “(1) necessarily raised, (2) actually disputed, (3) substantial, and (4) capable of resolution in federal court without disrupting the federal-state balance approved by Congress.”⁸⁷⁹ The claim here failed multiple parts of the test.

First, the claim did not “necessarily” raise a patent issue because the plaintiff alleged multiple grounds of professional negligence that did not involve patent law, so it was possible for the plaintiff to obtain relief without ever reaching the patent issues.⁸⁸⁰ In addition, the plaintiff alleged other alternative causes of action that did not involve patent law at all and might also provide relief without the need to reach the patent questions.⁸⁸¹

Furthermore, the patent issues were not “substantial,” because none were dispositive, and it was unclear if the state court would need to interpret the scope of the patent, provisions about prior art, or the timing of office action responses.⁸⁸² The result of this case also would not control other patent cases. Instead, the plaintiff’s allegations were mainly about “failure to communicate, overbilling, failure to accurately record time billed, failure to deliver work product, and misrepresentation of [the lawyer]’s expertise.”⁸⁸³ There was also no federal government interest in this dispute between private parties over malpractice.⁸⁸⁴

876. 781 F.3d 1340 (Fed. Cir. 2015).

877. *Id.* at 1342.

878. 133 S. Ct. 1059 (2013).

879. *NeuroRepair*, 781 F.3d at 1344 (quoting *Gunn*, 133 S. Ct. at 1065).

880. *Id.* at 1344–45.

881. *Id.*

882. *Id.* at 1345–46.

883. *Id.* at 1346.

884. *Id.* at 1347.

Finally, hearing this case in federal court would usurp the state judiciary's role in resolving the state issues here.⁸⁸⁵ It was no answer for the defendants to distinguish *Gunn* on the ground that the case at hand involved malpractice claims over patent litigation rather than patent prosecution.⁸⁸⁶ The court concluded that contemplating a hypothetical in which the defendant did not commit the alleged bad acts was the type of analysis rejected in *Gunn*, and, therefore, federal jurisdiction was improper.⁸⁸⁷

The other case, *Vermont v. MPHJ Technology Investments, LLC*,⁸⁸⁸ involved a claim under Vermont's Consumer Protection Act against a patent troll who had been harassing various businesses with allegations of patent infringement.⁸⁸⁹ Vermont initially filed its complaint in state court, the defendant filed counterclaims (including an assertion that the complaint was preempted by Title 35), and removed the case to federal court.⁸⁹⁰ The federal court then sent the case back to state court, after which the state amended its complaint, and the defendant removed again, arguing that the amended complaint asserted a claim under the newly-passed Vermont Bad Faith Assertions of Patent Infringement Act.⁸⁹¹ This appeal arises after a veritable game of judicial hot potato between the district and state courts. While Vermont initially filed in state court, the defendants moved to remove the case on no fewer than two occasions, claiming that the Vermont Bad Faith Assertions of Patent Infringement Act was violated by Vermont's amended complaint. Following the district court's second order removing the case back to state court, the defendant appealed to the Federal Circuit, alleging that a patent case arose under 28 U.S.C. § 1442(a).⁸⁹² The Federal Circuit affirmed.⁸⁹³

The Federal Circuit first held it had jurisdiction to review the remand.⁸⁹⁴ The America Invents Act had expanded the court's

885. *Id.* at 1348.

886. *Id.*

887. *Id.* at 1349 ("Addressing what would have happened had the alleged bad acts of Defendants not occurred requires a court to engage in precisely the sort of backward-looking, hypothetical analysis contemplated in *Gunn*.").

888. 803 F.3d 635 (Fed. Cir. 2015), *cert. denied*, 2016 WL 1551166 (U.S. Apr. 18, 2016) (No. 15-838).

889. *Id.* at 638.

890. *Id.* at 639–40.

891. *Id.* at 640–41.

892. *Id.* at 641–42.

893. *Id.* at 638.

894. *Id.* at 642, 647.

jurisdiction to entertain appeals involving a compulsory counterclaim that arose under the patent laws.⁸⁹⁵ The preemption counterclaim here was compulsory because the same underlying facts were involved in both the counterclaim and the state's claim.⁸⁹⁶ Further, the counterclaim arose under federal law, because, under *Gunn v. Minton*, it raised significant federal issues with consequences beyond this case that could impact future patent litigation, and allowing the state court to resolve it would risk inconsistent judgments with federal courts.⁸⁹⁷

Turning to the merits, though, the court held that removal was not proper under § 1442(a), the only basis argued to it.⁸⁹⁸ Section 1442(a) allows for removal by, among others, owners of federally derived property rights where the suit impacts the validity of any federal law; the defendant here removed on the theory that the patent was a federally derived property right granted by the Patent Office, and that the complaint called into question federal law by seeking relief under Vermont's Bad Faith Assertions of Patent Infringement Act (BFAPIA).⁸⁹⁹ The court rejected the argument that the complaint sought relief under the BFAPIA because the language in the complaint (seeking relief under "Vermont law") was vague, the state had disavowed seeking relief under the BFAPIA, and other extrinsic evidence suggested that the state had not intended to do so.⁹⁰⁰ Because the defendant admitted that its removal request turned on whether the state sought relief under the BFAPIA, the court affirmed the refusal to remove and did not reach any additional arguments.⁹⁰¹

The two results here are an odd juxtaposition. The Federal Circuit held it had jurisdiction to hear the appeal because there was a counterclaim arising under federal patent law.⁹⁰² That same counterclaim would seem to necessarily give the defendant the right to remove under 28 U.S.C. § 1454, which states that "[a] civil action in which *any* party asserts a claim for relief *arising under* any Act of Congress relating to patents . . . may be removed to [federal] district court."⁹⁰³ But the defendant did not argue this route of removal on appeal.

895. *Id.* at 643–45.

896. *Id.* at 645.

897. *Id.* at 645–47.

898. *Id.* at 652.

899. *Id.* at 647.

900. *Id.* at 647–51.

901. *Id.* at 648, 651–52.

902. *Id.* at 645–47.

903. 28 U.S.C. § 1454(a) (2012) (emphasis added).

B. Preclusion Issues

The Federal Circuit decided two cases on issue preclusion, holding that it applied in one, but not the other. The court also extended the Supreme Court's *Kessler* doctrine,⁹⁰⁴ a preclusion doctrine that had long been dormant until revived in 2014 by *Brain Life, LLC v. Elekta Inc.*⁹⁰⁵

The first case, *Soverain Software LLC v. Victoria's Secret Direct Brand Management, LLC*,⁹⁰⁶ held that the patentee's asserted claims were invalid based on issue preclusion.⁹⁰⁷ Three of the claims had been invalidated in a prior appeal, but the patentee argued that it did not have a "full and fair opportunity" to litigate their validity.⁹⁰⁸ The procedural posture of the prior case was odd: during trial, the district court had granted JMOL of non-obviousness, but the Federal Circuit reversed and entered JMOL of obviousness, even though the defendant there sought only a new trial (not JMOL).⁹⁰⁹ The patentee argued that it would have pursued different or additional arguments in the prior appeal if it knew outright reversal was possible.⁹¹⁰ But this did not prevent the patentee from fairly litigating the issue, as it had the incentive to raise all its arguments in the prior appeal.⁹¹¹ A fourth claim was also invalidated based on issue preclusion.⁹¹² The validity of the fourth claim had not been explicitly addressed in the prior case, but depended on a claim that had been invalidated.⁹¹³ The claim's additional limitation did not add anything to materially impact the obviousness analysis, so issue preclusion applied to it as well.⁹¹⁴

By contrast, *United Access Technologies, LLC v. CenturyTel Broadband Services LLC*,⁹¹⁵ held that collateral estoppel (issue preclusion) did not apply to a general jury verdict of non-infringement from a prior case.⁹¹⁶ In that case, the district court denied JMOL of infringement, explaining that there was substantial evidence supporting two

904. See *Kessler v. Eldred*, 206 U.S. 285, 288–90 (1907) (allowing a company that successfully defends against a claim of patent infringement to continue business as usual without the fear of nuisance suits).

905. 746 F.3d 1045 (Fed. Cir. 2014).

906. 778 F.3d 1311 (Fed. Cir. 2015).

907. *Id.* at 1320.

908. *Id.* at 1315.

909. *Id.* at 1316–17.

910. *Id.* at 1317.

911. *Id.* at 1317–19.

912. *Id.* at 1319–20.

913. *Id.* at 1319.

914. *Id.* at 1319–20.

915. 778 F.3d 1327 (Fed. Cir. 2015).

916. *Id.* at 1335–36.

different grounds upon which the jury could have based its conclusion.⁹¹⁷ Neither ground was “necessary” to the verdict because the jury could have found non-infringement under either, and it was not clear what the jury actually relied upon.⁹¹⁸ The district court’s JMOL order did not clarify matters—it simply held that substantial evidence could have supported either ground.⁹¹⁹ Thus, this issue was different from a case in which it was clear that the prior tribunal had explicitly adopted and relied upon *both* independent grounds and the second court could apply estoppel confident that the same issue had been actually decided previously.⁹²⁰

*SpeedTrack, Inc. v. Office Depot, Inc.*⁹²¹ upheld a dismissal based on the *Kessler* doctrine, which “bars a patent infringement action against a customer of a seller who has previously prevailed against the patentee because of invalidity or noninfringement [sic] of the patent.”⁹²² The plaintiff had previously lost an infringement case against retailers for using Oracle software in a particular way, and then filed this second suit against another customer using the same Oracle software.⁹²³ The court rejected all three of the plaintiff’s arguments that *Kessler* did not bar the second suit.⁹²⁴

First, a customer (like Office Depot) could invoke the doctrine itself and did not have to attempt to have the seller (Oracle) intervene and become a party⁹²⁵:

Allowing customers to assert a *Kessler* defense is consistent with the [c]ourt’s goal of protecting the manufacturer’s right to sell an exonerated product free from interference or restraint. A manufacturer cannot sell freely if it has no customers who can buy freely. Indeed, the [c]ourt subsequently explained that the *Kessler* doctrine grants a limited trade right that attaches to the “product—to a particular thing—as an article of lawful commerce.”⁹²⁶

917. *Id.* at 1329.

918. *Id.* at 1333.

919. *Id.* at 1334.

920. *Id.* at 1334–35.

921. 791 F.3d 1317 (Fed. Cir. 2015), *cert. denied*, 136 S. Ct. 801 (2016).

922. *Id.* at 1323 (quoting *MGA, Inc. v. Gen. Motors Corp.*, 827 F.2d 729, 734 (Fed. Cir. 1987)).

923. *Id.* at 1321.

924. *Id.* at 1329.

925. *Id.* at 1325–27.

926. *Id.* at 1326–27 (quoting *Rubber Tire Wheel Co. v. Goodyear Tire & Rubber Co.*, 232 U.S. 413, 418–19 (1914)). It is interesting to contrast the Federal Circuit’s view that the *Kessler* doctrine follows the product, with its conclusion in *Helferich*,

Second, it did not matter that Oracle was selling only a component of the accused method because the plaintiff could not identify any material differences between the current defendant's accused use of that software and the prior defendant's accused use, which had been found to be non-infringing.⁹²⁷

Third, the Federal Circuit reaffirmed that the *Kessler* doctrine remains binding precedent because, although the case is over a century old and was decided when rules of mutuality strictly circumscribed other preclusion doctrines, the Supreme Court has never overruled it.⁹²⁸

C. Mootness

Two Federal Circuit opinions dealt with mootness issues that occurred due to settlements. *Versata Software, Inc. v. Callidus Software, Inc.*⁹²⁹ held that, when the parties stipulate to dismiss the complaint under Federal Rule of Civil Procedure 41(a), it moots any pending interlocutory appeal that has not yet been decided.⁹³⁰ Here, the parties had not flagged the stipulated dismissal for the Federal Circuit before it issued its opinion, which addressed the issue of whether a stay was appropriate pending a covered business method proceeding.⁹³¹ The court thus granted a subsequent motion to vacate its prior opinion because the stipulated dismissal had rendered the appeal moot.⁹³²

*Tesco Corp. v. National Oilwell Varco, L.P.*⁹³³ was an appeal from a dismissal of a suit based on the court's inherent authority to address misrepresentations by one side's lawyers during trial.⁹³⁴ While the appeal was pending, the parties and their lawyers signed a settlement agreement with releases, yet the lawyers still pressed an appeal of the court's order, arguing statements in the opinion constituted a

discussed in Part V.B. below, that the exhaustion doctrine does not necessarily follow a product and applies only to "authorized purchasers."

927. *Id.* at 1328.

928. *Id.* at 1329.

929. 780 F.3d 1134 (Fed. Cir. 2015).

930. *Id.* at 1136.

931. *Id.* at 1135.

932. *Id.* at 1136.

933. 804 F.3d 1367 (Fed. Cir. 2015).

934. *Id.* at 1369.

sanction that continued to harm their reputation.⁹³⁵ A split panel held the appeal moot.⁹³⁶

The majority first noted that the lawyers could pursue an appeal only if the statements in the district court's order amounted to "a formal sanction or reprimand."⁹³⁷ But this issue was unnecessary to resolve because there was nothing that could be done to redress any lingering injury, given the settlement:

Once all parties entered into the settlement agreement, no party—except the Attorneys for reputational reasons—had any enduring interest in the underlying order dismissing the case with prejudice. The case was, for all purposes, complete, considering that the settlement resolved the outstanding motion for attorney[] fees under 35 U.S.C. § 285. The fact that the sanction was directed at Tesco in the opinion, not the Attorneys, further supports the conclusion that no party retains an interest in the *judgment* by the district court.⁹³⁸

There was no redressable reputational injury either. The court could not vacate the underlying order because it was mooted by the settlement. Nor could the court simply critique specific parts of the order—the Federal Circuit reviews judgments, not opinions. The only other option would be to remand for a full hearing on litigation misconduct, but that would "be an unnecessary use of the district court's and the parties' resources," and, in any event, the court had "no authority to order a court to conduct a hearing in a case that is closed and cannot be reopened."⁹³⁹

Judge Newman dissented, arguing that the lawyers should be given a chance to clear their names because a lawyer's reputation is his most valuable asset.⁹⁴⁰ She discussed how other circuits allowed appeals of sanctions orders even after settlement, and pointed out that, here, the lawyers had been denied the opportunity to present privileged documents in camera that they said would support their version of the facts.⁹⁴¹ By denying the lawyers this opportunity, Judge Newman felt that the court was interfering with their due process right to defend themselves.

935. *Id.*

936. *Id.* at 1379.

937. *Id.* at 1376.

938. *Id.* at 1377–78.

939. *Id.* at 1379.

940. *Id.* at 1379–80 (Newman, J., dissenting).

941. *Id.* at 1380.

D. Time to Appeal

The Federal Circuit dismissed one rather infamous appeal, *Two-Way Media LLC v. AT&T, Inc.*,⁹⁴² as untimely because the defendant missed the deadline for filing a notice of appeal.⁹⁴³ The problem arose from a kerfuffle about how the court's order denying most of the post-trial motions was labeled in the electronic notice sent to the parties.⁹⁴⁴ The email sent from the court was labeled "ORDER GRANTING [] Motion For Leave to File Sealed Document," but, in fact, the order—which could have been accessed by clicking the link in the email—denied the post-trial motions.⁹⁴⁵ The parties also received separate email notices that same day denying another post-trial motion and an order on the plaintiff's bill of costs.⁹⁴⁶ The court fixed its description on the docket a few days later but did not send the parties a follow-up email reflecting the correction.⁹⁴⁷ The deadline for appeal began to run on the day the court resolved all the post-trial motions, but the defendant's outside counsel did not realize this had happened until after the appeal window closed.⁹⁴⁸ They filed a motion to reopen the period under Federal Rules of Appellate Procedure 4(a)(5) and 4(a)(6), but the district court denied it, and a split Federal Circuit panel affirmed.⁹⁴⁹

With respect to Rule 4(a)(5), the district court did not abuse its discretion by finding a lack of "excusable neglect or good cause," as required under the rule.⁹⁵⁰ As an initial matter, the defendant had to show something more than lack of knowledge of the order because, under Federal Rule of Civil Procedure 77(d)(2), even a complete lack of notice would not toll the appeal clock.⁹⁵¹ The defendant argued that the "something more" was that it received an affirmatively misleading notice.⁹⁵² But the lawyers would have realized the substance of the order had they read it, and the

942. 782 F.3d 1311 (Fed. Cir. 2015).

943. *Id.* at 1313.

944. *Id.* at 1313–14.

945. *Id.* at 1313.

946. *Id.*

947. *Id.*

948. *Id.* at 1314.

949. *Id.* at 1313–14.

950. *Id.* at 1315–17.

951. FED. R. CIV. P. 77(d)(2) ("Lack of notice of the [docket] entry does not affect the time for appeal or relieve—or authorize the court to relieve—a party for failing to appeal within the time allowed, except as allowed by Federal Rule of Appellate Procedure (4)(a).").

952. *Two-Way Media*, 782 F.3d at 1315.

surrounding circumstances (including the correctly captioned notices denying another post-trial motion and awarding costs, which could only be issued if the plaintiff were the “prevailing party” on all the post-trial motions) suggested their failure to read the order or check the docket, which was not excusable. Federal Rule of Civil Procedure 79 did not help the defendant’s case because it simply required the district court to correct its docket (which it did), not to re-send corrected e-mail notices.⁹⁵³

With respect to Federal Rule of Appellate Procedure Rule 4(a)(6), the district court did not abuse its discretion in finding that a prerequisite to relief—failure to receive “notice under Federal Rule of Civil Procedure 77(d) of the entry of the judgment or order sought to be appealed”⁹⁵⁴—was absent.⁹⁵⁵ The defendant *did* receive notice when its counsel received the emails alerting them to the court’s order, and at least someone on the team downloaded a copy of the order.⁹⁵⁶ The court found that Rule 4(a)(6) applies only when a party did not receive notice of an order, not when the party received but failed to read an order.⁹⁵⁷ The panel added that, even if the defendant had not received notice, Rule 4(a)(6) still made reopening the appeal time discretionary, and the district court did not abuse its discretion by refusing to do so:

In this era of electronic filing—post-dating by some 60 years the era in which the cases cited by the dissent were issued—we find no abuse of discretion in a district court’s decision to impose an obligation to monitor an electronic docket for entry of an order which a party and its counsel already have in their possession and know that the clerk at least attempted to enter.⁹⁵⁸

Judge Dyk dissented, arguing that Rule 4(a)(6) required reopening the time to appeal.⁹⁵⁹ In his view, the order denying post-trial motions was not “entered on the docket” until after the district court corrected its description, yet the defendant never received notice of this event from the court.⁹⁶⁰ The defendant, thus, did not receive

953. *Id.* at 1316.

954. FED. R. APP. P. 4(a)(6)(A).

955. *Two-Way Media*, 782 F.3d at 1317–20 (concluding that the defendant did receive notice of the entry of judgment).

956. *Id.* at 1315.

957. *Id.* at 1318.

958. *Id.* at 1319–20.

959. *Id.* at 1320–24 (Dyk, J., dissenting).

960. *Id.* at 1323.

notice of the “entry of the judgment,”⁹⁶¹ even though it had notice of the underlying order itself, and hence met this requirement of Rule 4(a)(6).⁹⁶² The denial of relief could not be affirmed on discretionary grounds either, as the district court had not premised its decision on discretion but instead on a legal mistake about the meaning of Rule 4(a)(6).⁹⁶³

The panel’s result here seems right, because otherwise it would effectively immunize a party that did not read the court’s order. That said, the defendant’s mistake is perfectly understandable—the mislabeled docket entries were issued a couple days before Thanksgiving, most people don’t double-click on a boilerplate order granting a standard motion to seal, and, on a big trial team, you often assume that someone junior to you will alert you to any problems. It is a mistake that anyone could make, and one that calls to mind the phrase, “there, but for the grace of God, go I.”

E. No Ability to Review a Patent Office’s Revival Decision

In *Exela Pharma Sciences, LLC v. Lee*,⁹⁶⁴ a two-judge panel issued a per curiam opinion holding that the courts do not have jurisdiction to use an APA suit to review the Patent Office’s decision to revive a patent because, under the Patent Act’s scheme and framework, such challenges “under the APA [are] not legislatively intended.”⁹⁶⁵ Judge Dyk concurred but noted that the decision had the unfortunate effect of precluding any court review of a revival decision because *Aristocrat Technologies Australia Proprietary Ltd. v. International Game Technology*⁹⁶⁶ barred raising improper revival as a defense in a patent infringement action.⁹⁶⁷ He would reconsider *Aristocrat* en banc because (1) there is now no avenue to review improper revival, (2) improper revival is not a minor procedural error, (3) *Morganroth v. Quigg*⁹⁶⁸ held that PTO refusal to revive is reviewable under the APA, creating an asymmetry in which the refusal but not the grant of revival is reviewable, and (4) there are numerous non-statutory defenses in infringement actions.⁹⁶⁹ Judge Newman also concurred and responded that

961. FED. R. APP. P. 4(a)(6)(A).

962. *Two-Way Media*, 782 F.3d at 1323 (Dyk, J., dissenting).

963. *Id.* at 1323–24.

964. 781 F.3d 1349 (Fed. Cir. 2015) (per curiam).

965. *Id.* at 1353.

966. 543 F.3d 657 (Fed. Cir. 2008).

967. *Exela Pharma Scis., LLC*, 781 F.3d at 1354–55 (Dyk, J., concurring).

968. 885 F.2d 843 (Fed. Cir. 1989).

969. *Exela Pharma Scis.*, 781 F.3d at 1354–56 (Dyk, J., concurring).

Aristocrat was correctly decided because the Patent Act is explicit about defenses available in infringement actions in district courts and does not include improper revival among them.⁹⁷⁰

F. No Jurisdiction to Review the Patent Office's Refusal to Terminate an Inter Partes Reexamination

*Automated Merchandising Systems, Inc. v. Lee*⁹⁷¹ involved a situation where two parties settled a patent suit, agreed to a consent judgment stipulating that the patents were valid, and dismissed the suit.⁹⁷² Thereafter, the plaintiff sought to terminate the pending inter partes reexamination on the patents, pursuant to 35 U.S.C. § 317(b), which requires a reexamination to halt upon a final decision entered against the requestor in district court.⁹⁷³ The Patent Office refused to terminate the proceedings, precipitating an APA suit by the patentee against the Patent Office's Director.⁹⁷⁴

The Federal Circuit held that the Patent Office's decision was not a "final agency action," as required by 5 U.S.C. § 704,⁹⁷⁵ and thus could not be reviewed.⁹⁷⁶ The Patent Office's decision "was as interlocutory, as far from final, as the run-of-the-mill district-court denial of a motion to dismiss."⁹⁷⁷ The claims' patentability might be confirmed, which would moot any concerns about how to interpret § 317(b). Moreover, the order did not determine either of the parties' legal rights or obligations—the patentee had not yet lost any patent rights, and the mere requirement that it continue participating in agency proceedings to defend its rights was not enough to make the decision here final.⁹⁷⁸

970. *Id.* at 1353–54 (Newman, J., concurring).

971. 782 F.3d 1376 (Fed. Cir.), *cert. denied*, 136 S. Ct. 419 (2015).

972. *Id.* at 1377.

973. 35 U.S.C. § 317(b) (2012) (requiring "[a]ny agreement or understanding between the patent owner and a petitioner" to be in writing); *Automated Merch. Sys., Inc.*, 782 F.3d at 1377.

974. *Automated Merch. Sys., Inc.*, 782 F.3d at 1377.

975. See 5 U.S.C. § 704 (2012) (limiting judicial review of agency actions to actions "made reviewable by statute [or a] final agency action").

976. *Automated Merch. Sys., Inc.*, 782 F.3d at 1377–78. The court also noted that the Patent Office was raising this argument for the first time on appeal, but agreed to consider the issue because its resolution was "beyond doubt," it presented an ongoing issue of "public concern" in other proceedings, and it was fully briefed on appeal. *Id.* at 1379–80.

977. *Id.* at 1380.

978. *Id.* at 1381.

For completeness, the panel also noted that mandamus was unavailable because the patentee would have an adequate remedy as part of any appeal from a final decision.⁹⁷⁹ Nor was review available under the Declaratory Judgment Act, as this cannot be used to circumvent the normal procedures for judicial review under the APA.⁹⁸⁰

G. *Exclusive Licensee Standing*

2015 yielded two cases addressing an exclusive licensee's standing to sue in its own name, both authored by Judge Chen. One found standing, while the other did not.

*Alps South, LLC v. Ohio Willow Wood Co.*⁹⁸¹ reversed a damages judgment because the exclusive licensee was required to join the patent owner as a co-plaintiff but failed to do so.⁹⁸² The licensee had argued that it had "all substantial rights" to the patent, entitling it to sue in its own name.⁹⁸³ But the original license restricted the licensee's right to sue for infringement to a particular field of use, which was "fatal" to the licensee's standing to sue on its own.⁹⁸⁴ Moreover, a later assignment, executed after the suit was filed, could not fix the problem because "[n]unc pro tunc assignments are not sufficient to confer retroactive standing."⁹⁸⁵ Precedent permitting a licensee to prevent dismissal by joining the patent owner under Federal Rule of Civil Procedure 19(a)(2) was inapplicable because no such joinder was attempted here. It also did not matter that the licensee had filed a supplemental complaint after a reexamination certificate issued because standing had to be established as of the original complaint.

By contrast, in *Keranos, LLC v. Silicon Storage Technology, Inc.*,⁹⁸⁶ the court determined the exclusive licensee had "all substantial rights" in the patent and thus standing to sue.⁹⁸⁷ The licensee had "the exclusive past, present, and future rights to sue and recover for infringement, to make, use, import, and sell products covered by the

979. *Id.* at 1381–82.

980. *Id.*

981. 787 F.3d 1379 (Fed. Cir. 2015), *cert. denied*, 136 S. Ct. 897 (2016).

982. *Id.* at 1386.

983. *Id.* at 1383.

984. *Id.* at 1383–84.

985. *Id.* at 1384 (quoting *Enzo APA & Son, Inc. v. Geapag A.G.*, 134 F.3d 1090, 1093 (Fed. Cir. 1998)).

986. 797 F.3d 1025 (Fed. Cir. 2015).

987. *Id.* at 1031.

patents, and to negotiate and grant sublicenses.”⁹⁸⁸ That the agreement blocked the patentee from suing infringers or even participating in any lawsuit was a strong indication that it conveyed all substantial rights.⁹⁸⁹ Another confidential provision gave the licensee “an exclusive right” that was “a proprietary interest in the patents,” while yet another catch-all conveyed “any and all other substantial rights . . . necessary and sufficient under any applicable law or precedent to confer standing and permit [the licensee] to initiate any actions on its own.”⁹⁹⁰ Nevertheless, the defendants argued that *Mars, Inc. v. Coin Acceptors, Inc.*⁹⁹¹ held that only one with legal title could sue on an expired patent (like this one).⁹⁹² The court rejected that position: “*Mars* merely reiterates the established rule that for any patent, expired or not, transferring only the right to sue for past damages, divorced from title, is not enough to give the owner of that right standing under the Patent Act.”⁹⁹³ It thus refused to create different standing rules for expired and unexpired patents.

H. Requirement to Pursue Infringement in the Court of Claims

The Federal Circuit in *Astornet Technologies Inc. v. BAE Systems, Inc.*⁹⁹⁴ affirmed dismissal of a district court patent suit where the patentee’s sole remedy was a suit against the United States in the U.S. Court of Federal Claims under 28 U.S.C. § 1498.⁹⁹⁵ The statute says that a patentee’s remedy where an invention “is used . . . by . . . the United States” is a suit against it in the Court of Federal Claims.⁹⁹⁶ Here, the operative complaints alleged that several government contractors were liable for inducing and contributing to infringement by a government agency, the Transportation Security Administration (TSA).⁹⁹⁷ Those allegations necessarily included an

988. *Id.*

989. *Id.* at 1031–32.

990. *Id.* at 1032.

991. 527 F.3d 1359 (Fed. Cir. 2008).

992. See *Keranos*, 797 F.3d at 1032–33.

993. *Id.* at 1033.

994. 802 F.3d 1271 (Fed. Cir. 2015).

995. *Id.* at 1273.

996. 28 U.S.C. § 1498(a) (2012) (“Whenever an invention described in and covered by a patent of the United States is used or manufactured by or for the United States without license of the owner thereof or lawful right to use or manufacture the same, the owner’s remedy shall be by action against the United States in the United States Court of Federal Claims for the recovery of his reasonable and entire compensation for such use and manufacture.”).

997. *Astornet Techs.*, 802 F.3d at 1273.

allegation of underlying direct infringement by the United States, by virtue of its use of the defendants' products: "The direct infringement alleged as a prerequisite for the alleged indirect infringement is a use of the patented invention 'by . . . the United States,'" and thus falls within the ambit of § 1498.⁹⁹⁸ Section 1498's language "is not limited to claims that are filed against the United States or its government agencies" and "it would cut a substantial hole in the provision, and its intended function, to read it to be limited in that way."⁹⁹⁹ The patentee had made no allegation of direct infringement by the contractors in its complaint, so it was thus unnecessary to address whether such a claim could survive or if it would also be barred based on government consent or authorization to conduct the use.¹⁰⁰⁰

I. Finality

The Federal Circuit has struggled in recent years over the relationship between district court judgments and simultaneous Patent Office proceedings that result in an invalidity determination. *Fresenius USA, Inc. v. Baxter International, Inc.*¹⁰⁰¹ ultimately concluded that when the Patent Office's determination is upheld on appeal before the district court judgment becomes final, it moots the ongoing district court proceedings.¹⁰⁰² By contrast, in *Versata Computer Industry Solutions, Inc. v. SAP AG*,¹⁰⁰³ the court refused to set aside a district court damages judgment under Federal Rule of Civil Procedure 60 that had become final before the Patent Office's determination could be affirmed in an Article III court.¹⁰⁰⁴

The Federal Circuit faced another question in the race between a reexamination and district court proceedings in *ePlus, Inc. v. Lawson Software, Inc.*¹⁰⁰⁵ The original panel opinion was from 2014, but the court denied rehearing en banc in 2015 and issued a revised panel opinion, so it is worth revisiting.¹⁰⁰⁶ In the modified opinion, the

998. *Id.* at 1277 (quoting 28 U.S.C. § 1498(a)).

999. *Id.* (emphasis omitted).

1000. *Id.* at 1278.

1001. 721 F.3d 1330 (Fed. Cir. 2013).

1002. *Id.* at 1332.

1003. 564 F. App'x 600 (Fed. Cir.) (per curiam), *cert. denied*, 134 S. Ct. 1013 (2014).

1004. *Id.* at 600–01.

1005. 760 F.3d 1350 (Fed. Cir. 2014), *modified by* 789 F.3d 1349 (Fed. Cir. 2015), *reh'g en banc denied*, 790 F.3d 1307 (Fed. Cir. 2015).

1006. *See* 789 F.3d at 1351 (modifying the panel's 2014 decision, 760 F.3d 1350 (Fed. Cir. 2014)); 790 F.3d at 1370 (denying a petition for rehearing en banc).

court unanimously held that an injunction must be vacated once a final judgment of invalidity is made regarding the patent at issue.¹⁰⁰⁷ But the panel split over whether sanctions for civil contempt based on the now-vacated injunction must also be vacated.¹⁰⁰⁸

The majority held that the civil contempt sanctions must be set aside too.¹⁰⁰⁹ It cited *Fresenius* for the proposition that “where the scope of relief remains to be determined, there is no final judgment binding the parties (or the court).”¹⁰¹⁰ It then concluded that the injunction was not actually “final” because the original judgment had been modified on appeal to invalidate two claims, and it was unclear whether a similarly broad injunction could be supported by the remaining claim that had not been invalidated.¹⁰¹¹ In particular, the prior opinion had invalidated system claims, leaving only a method claim, which might not have supported a continued injunction on selling and manufacturing the accused products, as opposed to just internal use of them.¹⁰¹² Although it was possible the original injunction might still stand based on an inducement theory, this was an open issue because the prior opinion had not found the defendant’s sale necessarily an inducing act.¹⁰¹³

Judge O’Malley dissented from the panel decision, arguing that the injunction was indeed final, and that, to the extent it was not, *Fresenius* should be reconsidered given the problematic result here.¹⁰¹⁴ Judge O’Malley noted that the prior opinion had affirmed the judgment of inducement on the remaining claim, and so there was no issue of changing the injunction on that issue.¹⁰¹⁵ Judge O’Malley distinguished *Fresenius* on the basis that (1) the defendant here did not appeal the validity of the remaining claim, making the district court judgment immediately final as to that issue, and (2) *Fresenius* had vacated and remanded the damages judgment, while the prior panel

1007. 789 F.3d at 1355–56.

1008. Compare *id.* at 1361 (holding that the contempt sanctions must be vacated), with *id.* at 1362 (O’Malley, J., dissenting) (dissenting with respect to the majority’s holding on contempt sanctions).

1009. *Id.* at 1361 (majority opinion).

1010. *Id.* at 1358 (quoting *Fresenius USA, Inc. v. Baxter Int’l, Inc.*, 721 F.3d 1330, 1341 (Fed. Cir.), *cert. denied*, 134 S. Ct. 2295 (2013)).

1011. *Id.*

1012. *Id.* at 1360–61.

1013. *Id.*

1014. *Id.* at 1362 (O’Malley, J., dissenting).

1015. *Id.* at 1365. Another part of the injunction had to be modified based on the invalidation of other claims, but that was irrelevant.

opinion here had not vacated the injunction.¹⁰¹⁶ Finally, she expressed concern that the panel's "approach to finality will further displace the critical role of district courts in patent infringement suits" by allowing the Patent Office's decision to displace a federal court's final judgment, and she argued that the majority was taking the "stingiest" view of finality in this context, despite taking a liberal view of finality in the context of whether a judgment is immediately appealable.¹⁰¹⁷

Judge Newman, joined by Judges O'Malley and Wallach, dissented from denial of rehearing en banc, arguing that the majority's rule conflicted with regional circuit precedent and undermined the interest in finality of district court judgments.¹⁰¹⁸ The fact that the injunction was later dissolved did not "erase past contempt."¹⁰¹⁹

Judge Moore, joined by Judges O'Malley, Reyna, and Wallach, also dissented from denial of rehearing en banc, because she believed the injunction was final.¹⁰²⁰ She thought the majority's rule "encourages defendants to scrap and fight to keep underlying litigation pending in the hope that they will fare better with the PTO and then be able to unravel the district court judgment against them."¹⁰²¹ She had "no problem with the dual track system Congress has created," but added that "for at least a subset of cases, defendants are abusing the process by doing both," which "is wasteful of judicial, executive, and party resources, and it is just plain unfair."¹⁰²²

Both sides have strong points. It is unpalatable to require a defendant to pay a large damages judgment on a patent later invalidated simply because the district court litigation was able to beat the Patent Office to final judgment. On the other hand, everyone has an interest in finality regardless of whether an arguably more correct result could have been reached.

It will be interesting to see how the law continues to develop in this area. The court may announce decisions similar to *ePlus* over the next couple of years, as some of the remaining reexamination proceedings become final. But, once that crop of cases works through the system, these issues may disappear with the introduction of the new, faster post-grant proceedings of the America Invents Act.

1016. *Id.* at 1367.

1017. *Id.* at 1370–71.

1018. *ePlus, Inc. v. Lawson Software, Inc.*, 790 F.3d 1307, 1311 (Fed. Cir. 2015) (Newman, J., dissenting), *cert. denied*, 136 S. Ct. 1166 (2016).

1019. *Id.* at 1313–14.

1020. *Id.* at 1314 (Moore, J., dissenting).

1021. *Id.* at 1314 (footnote omitted).

1022. *Id.* at 1315.

Not only are the new IPR and CBM proceedings finished sooner, but district courts have been more willing to stay cases in favor of them than they were with the slower reexamination proceedings. So there may be fewer races between the district court and the Patent Office if litigation proceeds exclusively in the Patent Office. And any races that still remain may not be as close as they once were because the Patent Office proceedings are now more likely to beat the district court to judgment.

J. Standing to Bring a False Marking Suit

After a deluge of harassing false marking claims, Congress amended 35 U.S.C. § 292(b) to restrict the suits to plaintiffs who could show they had suffered a “competitive injury” from the defendant’s acts, rather than allowing any private citizen to file a qui tam claim.¹⁰²³ The Federal Circuit decided its first case interpreting the term “competitive injury,” *Sukumar v. Nautilus, Inc.*,¹⁰²⁴ and affirmed the dismissal of a suit because the plaintiff had not been injured.¹⁰²⁵ The plaintiff admitted that he was not an actual competitor because he was not currently selling products, but argued that he still suffered an injury because he might potentially have competed with the defendant.¹⁰²⁶ The court held that “a potential competitor may suffer a competitive injury if it has attempted to enter the market,” elaborating that “[a]n attempt is made up of two components: (1) intent to enter the market with a reasonable possibility of success, and (2) an action to enter the market.”¹⁰²⁷ However, “a subjective intent to compete” alone was not sufficient.¹⁰²⁸

The plaintiff’s evidence was insufficient to meet these requirements. The parties’ prior licensing negotiations implied that the plaintiff “intended only to open senior rehabilitation centers, which would not operate in competition with Nautilus.”¹⁰²⁹ Plus, the plaintiff had not taken action to enter the market by the time it filed the case—it had no business plan, prototype, employees, or

1023. 35 U.S.C. § 292(b) (2012) (“A person who has suffered a competitive injury as a result of a violation of this section may file a civil action in a district court of the United States for recovery of damages adequate to compensate for the injury.”).

1024. 785 F.3d 1396 (Fed. Cir. 2015).

1025. *Id.* at 1398, 1404.

1026. *Id.* at 1400.

1027. *Id.*

1028. *Id.* at 1402.

1029. *Id.* at 1403.

engineering knowledge, and did not even investigate developing manufacturing capacity.¹⁰³⁰

K. Court Review of Interference Proceedings

*Biogen MA, Inc. v. Japanese Foundation for Cancer Research*¹⁰³¹ dealt with a quirky procedural issue—what type of review can a party that loses an interference proceeding obtain after the statutory amendments in the AIA?¹⁰³² Before the AIA, the losing party had two options—(1) it could file a direct appeal to the Federal Circuit under 35 U.S.C. § 141,¹⁰³³ or (2) it could file suit in federal district court under 35 U.S.C. § 146.¹⁰³⁴ The major difference between the two regimes was the standard of review and scope of the evidentiary record. Under the direct appeal route, Federal Circuit review was limited to the record compiled before the agency, and the agency’s factual findings are upheld if supported by substantial evidence.¹⁰³⁵ By contrast, with the district court route, the parties had a chance to submit completely new evidence, and the district court reviews all issues *de novo*.¹⁰³⁶

But Congress changed that regime in 2011 when it passed the AIA and again in 2013 the subsequent Technical Corrections Act (TCA).¹⁰³⁷ With the change to a first-to-file system, interference proceedings would no longer be necessary for patents with priority dates on or after September 16, 2012 and were eliminated.¹⁰³⁸ Earlier patents filed under the first-to-invent regime might still be subject to interferences, but only if they expired on or after September 16, 2012. Congress removed all the references to interferences from § 141 and § 146 in the AIA to reflect that they would not be available for first-to-file patents, but then addressed court review of ongoing

1030. *Id.* at 1403–04.

1031. 785 F.3d 648 (Fed. Cir. 2015), *cert. denied*, 136 S. Ct. 1450 (2016) (mem.).

1032. *Id.* at 649, 654.

1033. *Id.* at 652 at n.4.

1034. *Id.*

1035. *Id.*; *see* *Dickinson v. Zurko*, 527 U.S. 150, 150, 164 (1999) (discussing the development of “substantial evidence” standard in direct review).

1036. *Hyatt v. Kappos*, 625 F.3d 1320, 1322 (Fed. Cir. 2010).

1037. Leahy-Smith America Invents Act Technical Corrections Act (TCA), Pub. L. No. 112-274, 126 Stat. 2456 (2013).

1038. 35 U.S.C. § 141 (2012); TCA § 1(k), 126 Stat. 2456, 2457–58; *see also* *Biogen*, 785 F.3d at 654 (noting that “[t]he AIA changed the patent system, among other things, from a first-to-invent to a first-to-file regime for determining patent priority. In doing so, it amended the patent statute’s central provisions on patentability, . . . established derivation proceedings and eliminated interference proceedings” (citations omitted)).

interference proceedings by preserving § 141 and § 146 review for interferences declared before September 16, 2012 (but not after).¹⁰³⁹ However, Congress had forgotten about interference proceedings that might still be declared after September 16, 2012 on existing first-to-file patents, so it fixed this glitch in the TCA by adding a provision for § 141 review for those interferences (but not § 146 district court review).¹⁰⁴⁰ The question in *Biogen* was whether these provisions still left § 146 review available for interferences declared on or after September 16, 2012.¹⁰⁴¹

Biogen held that § 146 review is not available for such interferences.¹⁰⁴² The “express provisions in the statute” had eliminated § 146 review for all interferences, but then restored it for those declared before September 16, 2012.¹⁰⁴³ The implication was that § 146 review did not survive for later-declared interferences. Indeed, if the old statute’s court review provisions had remained in force, then there would have been no need for Congress to pass the TCA to restore § 141 review for later declared interferences. That the TCA revived § 141 review but not § 146 review was also a strong sign that Congress did not intend for interference losing parties to still be able to run to district court.¹⁰⁴⁴

L. Standing to Correct Inventorship

*Shukh v. Seagate Technology, LLC*¹⁰⁴⁵ held that an omitted inventor has standing to correct inventorship under 35 U.S.C. § 256 if it will redress a concrete and particularized reputational injury, even if the inventor does not have any ownership or financial interest in the patent.¹⁰⁴⁶ The evidence established at least an issue of fact regarding whether the plaintiff’s reputation was harmed based on his omission, including the fact that, in this industry, both scientists and Seagate itself valued the number of patents a person had.¹⁰⁴⁷

1039. AIA, Pub. L. 112-29, § 6(f)(3)(C), 125 Stat. 284, 311 (2011).

1040. TCA, § 1(k)(3), 126 Stat. at 2458.

1041. 785 F.3d at 654.

1042. *Id.* at 657.

1043. *Id.*

1044. On the merits, *Biogen* affirmed a finding that the losing party was estopped by an adverse judgment in a prior interference where it could not show that the count in this one was patentability distinct. *Id.* at 657–58.

1045. 803 F.3d 659 (Fed. Cir. 2015).

1046. *Id.* at 663.

1047. *Id.* at 663–64.

M. Personal Jurisdiction

One case, *Celgard, LLC v. SK Innovation Co.*,¹⁰⁴⁸ affirmed a dismissal for lack of personal jurisdiction.¹⁰⁴⁹ The suit was filed in North Carolina against a South Korean company that made battery parts to be used in Kia electric vehicles.¹⁰⁵⁰ Dismissal was appropriate under any potential personal jurisdiction theory.¹⁰⁵¹

First, the defendant had not “purposefully directed” activities toward North Carolina.¹⁰⁵² Advertisements by local Kia dealers for a car that might have included the defendant’s components were irrelevant because the dealers were not the defendant’s agents or alter egos.¹⁰⁵³ Likewise, it did not matter whether there was a joint venture between the defendant and Kia’s parent company, as there was no evidence that the North Carolina dealers knew of the agreement.¹⁰⁵⁴

A “stream of commerce theory” would not work either. The panel acknowledged the continuing uncertainty in Supreme Court precedent over whether “mere placement” of goods into the stream of commerce was sufficient to establish personal jurisdiction, “or whether intent that the products reach the forum is required.”¹⁰⁵⁵ The plaintiff did not show either; there was no evidence that any of defendant’s products actually entered North Carolina or that defendant was aware that its products entered into the forum state.¹⁰⁵⁶ Further, the plaintiff’s proffer of data that was “not inconsistent with” the presence of the defendant’s product in a North Carolina vehicle was not enough because the data did not rule out the possibility that it was another manufacturer’s component.¹⁰⁵⁷

1048. 792 F.3d 1373 (Fed. Cir. 2015).

1049. *Id.* at 1375.

1050. *Id.* at 1376.

1051. *Id.* at 1378–82 (discussing and then dismissing the plaintiff’s two arguments for personal jurisdiction: the “purposeful direction” theory and the “stream of commerce” theory). The panel also noted that it was appropriate to decide personal jurisdiction by assuming the plaintiff’s allegations were true because the district court did not hold an evidentiary hearing. *Id.* at 1378. Proof by a preponderance of the evidence was not required in this posture, but none of this mattered because the plaintiff could not have won under even the lesser burden of proof.

1052. *Id.* at 1379.

1053. *Id.*

1054. *Id.* at 1379–80.

1055. *Id.* at 1381.

1056. *Id.* at 1382.

1057. *Id.*

N. Protective Order Modification

The Federal Circuit typically does not review protective order disputes, but *In re Posco*¹⁰⁵⁸ issued a writ of mandamus directing a district court to reconsider its modification of a protective order allowing foreign court access to discovery in the United States.¹⁰⁵⁹ The district court applied a Third Circuit decision to grant a motion to permit the plaintiff to use the defendant's manufacturing documents against it in co-pending Japanese and Korean litigation if the courts there agreed that the material would be kept confidential.¹⁰⁶⁰

The Federal Circuit concluded that this was legal error because the court had not considered any of the relevant factors under 28 U.S.C. § 1782(a).¹⁰⁶¹ Section 1782(a) establishes a procedure for a U.S. court to direct a defendant to produce documents for use in foreign litigation.¹⁰⁶² The panel acknowledged that it did not directly govern here and is not the exclusive remedy for obtaining documents for foreign litigation.¹⁰⁶³ But the factors relevant under § 1782(a) were pertinent here, including:

- (1) whether "the person from whom discovery is sought is a participant in the foreign proceeding"; (2) "the nature of the foreign tribunal, the character of the proceedings underway abroad, and the receptivity of the foreign government or the court or agency abroad to U.S. federal-court judicial assistance"; (3) "whether the § 1782(a) request conceals an attempt to circumvent foreign proof-gathering restrictions or other policies of a foreign country or the United States"; and (4) whether the request is otherwise "unduly intrusive or burdensome."¹⁰⁶⁴

Because the district court did not address these factors, the Federal Circuit remanded the case instructing the lower court to reconsider the issue.¹⁰⁶⁵

Judge Hughes disagreed that § 1782 had any bearing on the dispute because the plaintiff here already had the documents it wanted to use, whereas a section 1782 case is a stand-alone action

1058. 794 F.3d 1372 (Fed. Cir. 2015).

1059. *Id.* at 1377.

1060. *Id.* at 1374; *see* Pansy v. Borough of Stroudsburg, 23 F.3d 772 (3d Cir. 1994).

1061. 794 F.3d at 1377.

1062. 28 U.S.C. § 1782(a) (2012).

1063. *See Posco*, 794 F.3d at 1377.

1064. *Id.* (quoting *Intel Corp. v. Advanced Micro Devices, Inc.*, 542 U.S. 241, 264–65 (2004)).

1065. *Posco*, 794 F.3d at 1377.

seeking to compel a new production.¹⁰⁶⁶ Nevertheless, he agreed that mandamus was appropriate because the district court's order had purported to restrict how a foreign court would use the produced information, contrary to principles of comity.¹⁰⁶⁷ He would set aside the order and instruct the district court to reconsider "whether 'good cause' exists to modify the protective order independent of a restriction on the foreign court's discretion."¹⁰⁶⁸

VIII. PHARMACEUTICAL AND BIOLOGICS LITIGATION

A. *The Safe Harbor of 35 U.S.C. § 271(e)*

Congress enacted the Hatch-Waxman Act to facilitate the entry of generic drugs onto the market, while also ensuring that they did not infringe valid patent rights. Congress wanted generic drug companies to be able to launch immediately after patent expiration (or after the patent was found invalid or not infringed), so it created a safe harbor¹⁰⁶⁹ that allows them to manufacture and test products without facing liability for infringement.¹⁰⁷⁰ Without the safe harbor, such preparatory activity would have infringed under § 271(a) if conducted in the United States (e.g., manufacturing test batches of the drug here), and the generic would have been unable to start testing its product.¹⁰⁷¹ The scope of the safe harbor has been the source of much debate, however, because its broad language might be thought to sweep in more than was necessary to achieve its specific purpose. The Federal Circuit decided three cases addressing the safe harbor's scope in 2015.

1066. See *id.* at 1377–78, 1380 (Hughes, J., concurring) (stating that § 1782 applies only to new discovery).

1067. *Id.* at 1381.

1068. *Id.*

1069. 35 U.S.C. § 271(e)(1) (2012) ("It shall not be an act of infringement to make, use, offer to sell, or sell within the United States or import into the United States a patented invention . . . solely for uses reasonably related to the development and submission of information under a Federal law which regulates the manufacture, use, or sale of drugs or veterinary biological products.").

1070. H.R. REP. NO. 98-857, pt. 1, at 15, 45 (1984), *reprinted in* 1984 U.S.C.C.A.N. 2647, 2648 ("The purpose of sections 271(e)(1) and (2) is to establish that experimentation with a patented drug product, when the purpose is to prepare for commercial activity which will begin after a valid patent expires, is not a patent infringement.").

1071. See 35 U.S.C. § 271(a); see also H.R. REP. NO. 98-857, pt. 1, at 45 (noting that, under the safe harbor provision, a party may begin preparatory activity "as long as the development was done to determine whether or not an application for approval would be sought").

One case, *Classen Immunotherapies, Inc. v. Elan Pharmaceuticals, Inc.*,¹⁰⁷² held that some post-approval testing can fall within the safe harbor's scope.¹⁰⁷³ The generic defendant conducted an additional clinical trial on its product's bioavailability and submitted that information to the U.S. Food and Drug Administration (FDA) to revise its product label.¹⁰⁷⁴ After observing that "the statutory language does not categorically exclude post-approval activities from the ambit of the safe harbor," and that some of those activities "serve similar purposes as pre-approval studies in ensuring the safety and efficacy of approved drugs," the court explained that Elan's trials to characterize the effect of food on the drug's absorption served such a purpose.¹⁰⁷⁵ The post-approval testing was not "routine" behavior that might be outside the safe harbor, but, in fact, "necessary" to maintaining the generic's approval.¹⁰⁷⁶

Classen also cast doubt on the patentee's arguments that the defendant's other behavior was outside the safe harbor. The court stressed that "subsequent disclosure or use of *information* obtained from an exempt clinical study, even for purposes other than regulatory approval, does not repeal that exemption of the clinical study, provided that the subsequent disclosure or use is itself not an *act of infringement* of the asserted claims."¹⁰⁷⁷ As a result, putting information from the study into a patent application was unlikely to change the outcome because filing a patent usually is not an act of infringement since it does not involve an act specified in § 271(a).¹⁰⁷⁸ Likewise, "placing the *information* submitted to the FDA on the product label after sNDA approval generally cannot be an infringement," because the information remains protected under the safe-harbor even after approval.¹⁰⁷⁹ A subsequent sale or use of the product with the new label might infringe, depending on what the patent covered, but that did not appear to be the case here. Nevertheless, the Federal Circuit remanded for the district court to sort out the particulars.¹⁰⁸⁰

1072. 786 F.3d 892 (Fed. Cir. 2015).

1073. *Id.* at 893–94.

1074. *Id.* at 896.

1075. *Id.* at 897.

1076. *Id.*

1077. *Id.* at 898 (citing *Teletronics Pacing Sys., Inc. v. Ventritex, Inc.*, 982 F.2d 1520, 1523–24 (Fed. Cir. 1992)).

1078. *Id.* at 898–99.

1079. *Id.* at 899.

1080. *Id.*

But the second case, *Momenta Pharmaceuticals, Inc. v. Teva Pharmaceuticals USA Inc.*,¹⁰⁸¹ shows that not all post-approval testing is within the safe harbor. Here, the defendant used the patented method of analyzing its commercial product for impurities, yet argued that this use was protected because it retained the information in accordance with an FDA regulation.¹⁰⁸² The court rejected this argument, noting that the patented testing was “routine[,]” because it was regularly and repeatedly conducted for each batch of the commercial product.¹⁰⁸³ Section 271(e)(1) “does not apply to information that may be routinely reported to the FDA, long after marketing approval has been obtained.”¹⁰⁸⁴ The court contrasted this from other non-routine submissions such as the (pre- or post-approval) submission of an application to market the drug, and noted also that the testing had nothing to do with obtaining FDA approval.¹⁰⁸⁵ It was thus outside § 271(e)’s safe harbor.¹⁰⁸⁶

The holding in the third case—*Shire, LLC v. Amneal Pharmaceuticals, LLC*¹⁰⁸⁷—was straightforward: a manufacturer was not liable for its sale of the active ingredient to a generic manufacturer for pre-approval testing to include in its abbreviated new drug application (ANDA).¹⁰⁸⁸ The generic’s testing was covered by the § 271(e)(1) safe harbor, so it was not a direct infringer, and the manufacturer thus could not be an inducer.¹⁰⁸⁹ It also noted that the manufacturer was not liable under § 271(e)(2) because it did not submit the ANDA itself.¹⁰⁹⁰

B. *Biologics Price Competition and Innovation Act (BPCIA)*

The healthcare reform legislation in 2010 included a new provision, the Biologics Price Competition and Innovation Act (BPCIA),¹⁰⁹¹ which created an abbreviated FDA approval pathway for follow-on biological products that are “highly similar” to a previously

1081. 809 F.3d 610 (Fed. Cir. 2015).

1082. *Id.* at 614–15.

1083. *Id.* at 620.

1084. *Id.* (emphasis omitted) (quoting *Classen Immunotherapies, Inc. v. Biogen IDEC*, 659 F.3d 1057, 1070 (Fed. Cir. 2011)).

1085. *Id.*

1086. *Id.* at 621.

1087. 802 F.3d 1301 (Fed. Cir. 2015).

1088. *Id.* at 1304.

1089. *Id.* at 1310–11.

1090. *Id.*

1091. Pub. L. No. 111-148, §§ 7001–03, 124 Stat. 119, 804–21 (2010) (codified as amended at 42 U.S.C. § 262 (2012), 35 U.S.C. § 271(e), 28 U.S.C. § 2201(b), 21 U.S.C. § 355 et seq.).

approved “reference product.”¹⁰⁹² The Act gives the “reference product’s” sponsor a twelve-year exclusivity period, and then allows others to seek approval to sell a biosimilar product by relying on the sponsor’s clinical data if they can convince the FDA of the products’ similarity.¹⁰⁹³ The Act also includes intricate provisions for resolving patent disputes between the sponsor and the biosimilar applicant.¹⁰⁹⁴ The Act is widely expected to generate many new applications for biosimilars and lead to extensive patent litigation.¹⁰⁹⁵ The Federal Circuit decided its first case interpreting BPCIA in 2015, *Amgen Inc. v. Sandoz Inc.*,¹⁰⁹⁶ and dealt with two important provisions.¹⁰⁹⁷

Some background on the statutory scheme is necessary to understand the court’s decision. The BPCIA’s system for resolving patent disputes contemplates an information exchange between the sponsor of the “reference product” and the biosimilar applicant.¹⁰⁹⁸ The biosimilar applicant first grants the patentee access to its application within twenty days after the FDA accepts it for review.¹⁰⁹⁹ The parties then exchange lists of patents that might be at issue, along with their positions on infringement, validity, and enforceability, and negotiate over which patents will be the subject of an immediate lawsuit.¹¹⁰⁰ When the parties finalize the list, the patentee has thirty days to sue the biosimilar applicant.¹¹⁰¹ Separately, the biosimilar applicant must also give the patentee at least 180-days’ notice before the biosimilar applicant can begin commercially marketing its product, and, once the patentee receives that notice (but not before), it can seek a preliminary injunction on any non-listed patents.¹¹⁰² Another provision allows the patentee, but

1092. § 7002(k)(2)(A)(i)(I)(aa), 124 Stat. at 805.

1093. § 7002(k)(3)–(4), 124 Stat. at 806–07.

1094. See Courtenay C. Brinckerhoff & Kristel Schorr, *Patent Watch: Have the Biosimilar Floodgates Been Opened in the United States?*, 14 NATURE REVS. DRUG DISCOVERY 303, 303 (2015) (describing the Biologics Price Competition and Innovation Act’s (BPCIA) provisions that resolve patent disputes, and noting that all litigation thus far has resulted from applications trying to avoid the Act’s negotiation processes).

1095. *Id.*

1096. 794 F.3d 1347, 1350 (Fed. Cir. 2015) (noting that this was the first case to interpret BPCIA).

1097. *Id.* at 1350–52 (referencing 42 U.S.C. § 262(k)–(l) of the BPCIA).

1098. § 7002(k)(6)–(7)(A), 124 Stat. at 807–09.

1099. 42 U.S.C. § 262(l)(1)–(2) (2012).

1100. *Id.* § 262(l)(3)–(5).

1101. *Id.* § 262(l)(6).

1102. *Id.* § 262(l)(7)–(9).

not the biosimilar applicant, to seek declaratory relief if the applicant does not cooperate in the listing process.¹¹⁰³

The first dispute in *Amgen* involved whether the statute required the biosimilar applicant to disclose its application and engage in the “patent dance” described above.¹¹⁰⁴ The panel majority held that it did not.¹¹⁰⁵ Although § 262(l)(2)(A) says that the biosimilar applicant (Sandoz) “shall provide” its application to the sponsor company (Amgen) within twenty days after the FDA accepts the application, the rest of the statute demonstrated that “shall” did not mean “must.”¹¹⁰⁶ In particular, § 262(l)(9)(C) says that, if the biosimilar applicant “fails to provide the application,” the sponsor may bring a declaratory judgment claim for infringement, validity, and enforceability of any patent.¹¹⁰⁷ Mandatory disclosure would render the latter provision superfluous. Further, the statute provided no procedure for Amgen to compel disclosure, which was consistent with the view that disclosure was optional.¹¹⁰⁸ The biosimilar applicant does face a potential downside from non-disclosure—it loses the right to bring a declaratory judgment of noninfringement because, under § 262(l)(9)(C), only Amgen could bring suit.¹¹⁰⁹ But the biosimilar applicant has the right to choose.

Judge Newman dissented on this issue, arguing that Sandoz had forfeited its ability to obtain FDA licensure under the Act by failing to comply with the Act’s disclosure requirements.¹¹¹⁰ In particular, she thought that § 262(l)(2) required Sandoz to disclose its application because the “shall” language was mandatory.¹¹¹¹ Judge Newman disagreed with the majority’s reading of § 262(l)(9), noting that it did not provide a complete remedy for the sponsor because it does not permit bringing suit regarding manufacturing process patents.¹¹¹²

The second dispute in *Amgen* related to when the biosimilar applicant may send its notice of commercial marketing (and thereby start the 180-day statutory clock for a preliminary injunction suit).¹¹¹³

1103. *Id.* § 262(l)(9).

1104. *Amgen Inc. v. Sandoz Inc.*, 794 F.3d 1347, 1354–55 (Fed. Cir. 2015).

1105. *Id.* at 1357.

1106. *Id.* at 1355–57.

1107. 42 U.S.C. § 262(l)(9)(C).

1108. *Amgen*, 794 F.3d at 1356.

1109. *Id.* at 1352, 1356.

1110. *Id.* at 1363 (Newman, J., concurring in part, dissenting in part).

1111. *Id.*

1112. *Id.* at 1364.

1113. *Id.* at 1357 (majority opinion).

The court held that the statute barred sending the notice before the biosimilar applicant received FDA approval because the statute ties the notice to a “biological product licensed under subsection (k),”¹¹¹⁴ and a biosimilar is not “licensed” until after it is approved.¹¹¹⁵ If Congress intended a different meaning, it could have referred to a biosimilar that was the “subject of the application,” as it did elsewhere.¹¹¹⁶ Furthermore, the biosimilar product’s uses and manufacturing are not set until FDA licensure, and it makes sense for any preliminary injunction suit to wait until “the scope of the approved license is known and the marketing of the proposed biosimilar product is imminent.”¹¹¹⁷ Requiring FDA licensure before the notice of commercial marketing did not improperly extend the sponsor’s twelve-year statutory exclusivity.¹¹¹⁸ Most biosimilar applications will be filed (and approved) during the twelve-year period, even though the application here was filed much later.¹¹¹⁹

Amgen further held that the biosimilar applicant could not avoid the 180-day exclusivity simply by refusing to give any notice at all.¹¹²⁰ Here, the term “shall” in § 262(l)(8) signals a mandatory requirement, because, unlike with § 262(l)(2), no other statutory provisions specify consequences for failing to meet it.¹¹²¹ In particular, § 262(l)(9) did not specify such a consequence because it applied only where the biosimilar applicant provides its application to the sponsor, which Sandoz did not do here.¹¹²² Therefore, where the biosimilar applicant refuses to provide its application, it must provide notice of commercial marketing. As a result, Sandoz’s initial notice was ineffective because Sandoz sent the notice upon acceptance of its application but before approval, and Sandoz was instead temporarily enjoined for 180 days following its second notice, which Sandoz sent upon FDA approval.¹¹²³

Judge Chen dissented on this issue, arguing that once a biosimilar applicant decides not to disclose its application, it is not required to

1114. *Id.* at 1357–58 (emphasis omitted) (citing 42 U.S.C. § 262(l)(8)(A) (2012)).

1115. *Id.* at 1357–58.

1116. *Id.* at 1358.

1117. *Id.* (“We believe that Congress intended the notice to follow licensure, at which time the product, its therapeutic uses, and its manufacturing processes are fixed.”).

1118. *Id.* (noting that the extra 180 days of market exclusion will be atypical, as most cases will be filed during the twelve-year exclusivity period).

1119. *See id.*

1120. *Id.* at 1358–60.

1121. *Id.* at 1359–60.

1122. *Id.* at 1359.

1123. *Id.* at 1359–60.

give the § 262(l)(8) notice of intent to commercially market a product because the sponsor is already permitted to file suit immediately.¹¹²⁴ He viewed the majority's interpretation of § 262(l)(8) as an extra 180-day exclusivity windfall to Amgen.¹¹²⁵

The split among the three panel members underscores how difficult and complicated the BPCIA will be to interpret. There are surely many other provisions with similar ambiguities, and the Federal Circuit will resolve many more of these disputes in the coming years as more biosimilar applications are filed, accepted, and approved.

C. Generic Manufacturers' Standing to Seek Declaratory Relief

Another Hatch-Waxman case, *Apotex, Inc. v. Daiichi Sankyo, Inc.*,¹¹²⁶ involved a unique situation in which two generic manufacturers were jockeying for position over the Hatch-Waxman Act's 180-day exclusivity for the first generic filer.¹¹²⁷ The controversy began when Daiichi, the patent owner, filed a prior suit against the first generic filer, Mylan.¹¹²⁸ Daiichi obtained a judgment of infringement and validity on one patent, but disclaimed the second, later-expiring patent after receiving Mylan's paragraph IV certification alleging it was not infringed and invalid.¹¹²⁹ Apotex, a second generic filer, subsequently sought FDA approval and made a paragraph III certification that it would not launch before the first patent expired, but Apotex filed the present suit against Daiichi seeking a declaratory judgment that the disclaimed patent was not infringed.¹¹³⁰ The district court refused to allow Mylan to intervene and then dismissed Apotex's suit for lack of an Article III controversy.¹¹³¹ The Federal Circuit reversed on both issues.¹¹³²

As an initial matter, Mylan had a right to intervene because, under various Hatch-Waxman Act provisions, the outcome of this litigation could impact whether Mylan, as the first ANDA-filer, was entitled to a 180-day period of initial marketing exclusivity, or whether the results of this litigation might cause it to forfeit that right.¹¹³³

1124. *Id.* at 1366–70 (Chen, J., dissenting in part).

1125. *Id.* at 1367.

1126. 781 F.3d 1356 (Fed. Cir.), *cert. denied*, 136 S. Ct. 481 (2015).

1127. *Id.* at 1358–60.

1128. *Id.* at 1359.

1129. *Id.*; *see also* 21 U.S.C. § 355(j)(2)(A)(vii)(IV) (2012).

1130. *Id.* at 1358–60.

1131. *Id.* at 1358–61.

1132. *Id.* at 1358.

1133. *Id.* at 1361.

As for jurisdiction, Apotex's claim against Daiichi met the Article III standards for concreteness, causation, and redressability. Apotex sought concrete relief in this suit because, if successful, such relief would remove one barrier to its ability to launch its product, and a potential launch had monetary stakes for Apotex, Daiichi, and Mylan. Daiichi's disclaimer was irrelevant because the patent was still listed in the Orange Book, so Apotex could not launch without winning this suit.¹¹³⁴

Daiichi caused the alleged harm by initially listing the patent in the Orange Book, regardless of whether that was proper at the time and despite its subsequent unsuccessful attempts to remove the listing. Apotex's lack of tentative FDA approval did not render the possibility of Apotex's relief too uncertain because the Hatch-Waxman Act contemplates litigation before tentative approval.¹¹³⁵

Finally, this action would redress Apotex's injury because a victory would likely allow it to launch its product sooner. Although Apotex was also blocked from entering the market by Mylan's 180-day exclusivity period, it could trigger a forfeiture of that period by obtaining the non-infringement judgment here and tentative approval of its product. There was no reason to require Apotex to obtain tentative approval before filing this action. The statute imposed no timing requirement that would force Apotex to obtain tentative approval before bringing this suit, so it was free to try to remove both barriers in parallel.¹¹³⁶

IX. DESIGN PATENTS

Given the potential damages upside of asserting design patents discussed above,¹¹³⁷ the Federal Circuit's substantive jurisprudence of the construction, infringement, and validity of such patents may become increasingly important. The key challenge in all these inquiries is separating the ornamental from the structural aspects of the design, as two cases demonstrated.

The first, *Apple Inc. v. Samsung Electronics Co.*, rejected a nitpicky argument about the jury instruction on functionality.¹¹³⁸ The defendant argued that a design's functional aspects must be ignored

1134. *Id.* at 1362–63.

1135. *Id.* at 1363–64.

1136. *Id.* at 1367–71.

1137. See *supra* Section VI.E and accompanying text.

1138. 786 F.3d 983, 1001 (Fed. Cir. 2015), *cert. granted in part on a different issue*, 84 U.S.L.W. 3350 (U.S. Mar. 21, 2016) (No. 15-777).

entirely in determining claim scope.¹¹³⁹ But, here, the district court correctly instructed the jury that only the design's ornamental aspects are pertinent to infringement, and, given that context, it was fine for the district judge to tell the jury to compare the "overall appearance" of the designs, as opposed to the "overall ornamental appearance."¹¹⁴⁰ Likewise, the instructions also correctly told the jury that actual deception is not required for infringement and that they "must" consider the prior art.¹¹⁴¹

The other case, *Ethicon Endo-Surgery, Inc. v. Covidien, Inc.*,¹¹⁴² dealt with a district court decision that ignored the ornamental aspects of the claimed ultrasonic surgical device.¹¹⁴³ The Federal Circuit initially reversed a determination that the patented design was invalid as dictated by function and an accompanying claim construction.¹¹⁴⁴ After reviewing precedent, the panel held that "an inquiry into whether a claimed design is primarily functional should begin with an inquiry into the existence of alternative designs."¹¹⁴⁵ Here, the defendant admitted there were alternatives, but argued that they did not work equally well.¹¹⁴⁶ That did not matter because (1) the surgeons' preferences were based on differences in design, not functionality, and (2) the products need only have "similar" functional capabilities to be alternatives.¹¹⁴⁷ The district court also erred by analyzing the designs at "too high of a level of abstraction," rather than focusing on just the ornamental aspects.¹¹⁴⁸ So the Federal Circuit reversed the invalidity determination and likewise reversed a claim construction, which incorrectly ignored ornamental aspects of the surgical device's trigger, torque knob, and activation buttons.¹¹⁴⁹

Nevertheless, *Ethicon* affirmed a summary judgment of non-infringement.¹¹⁵⁰ Having narrowed the claim construction to particular ornamental features, the court noted that the "conceptual" similarity between the patent and the accused product were not enough and that the district court correctly identified specific parts

1139. *Id.* at 998.

1140. *Id.* at 999 (emphasis omitted).

1141. *Id.* at 1000.

1142. 796 F.3d 1312 (Fed. Cir. 2015).

1143. *Id.* at 1314–15.

1144. *Id.* at 1328–32.

1145. *Id.* at 1330.

1146. *Id.*

1147. *Id.* at 1331.

1148. *Id.*

1149. *Id.* at 1334.

1150. *Id.* at 1315.

of the ornamental features that made the designs “plainly dissimilar.”¹¹⁵¹ Given the plain dissimilarity, the district court did not need to compare the claimed and accused designs with the prior art.

X. PATENT TERM ADJUSTMENT

The Federal Circuit decided three cases interpreting the Patent Term Adjustment Statute, 35 U.S.C. § 154(b). Congress enacted the statute as part of the switch from a patent term that was seventeen years from issuance to a term of twenty years from the earliest filing date.¹¹⁵² Congress recognized that, as a consequence of the switch, Patent Office delays in examining and issuing the patent could result in a shorter patent term, so it provided for certain adjustments to restore patent term day-for-day for any periods of Patent Office delay.¹¹⁵³ But Congress also wanted to ensure that an applicant who bore some or all responsibility for the delay did not benefit, and it thus provided for reductions during periods in which the applicant “failed to engage in reasonable efforts to conclude prosecution of the application.”¹¹⁵⁴ The Federal Circuit’s decisions dealt with various provisions implementing the details of this balance, and they all went against the patentees.

*Gilead Sciences, Inc. v. Lee*¹¹⁵⁵ interpreted the “reasonable efforts” offset for applicant delay.¹¹⁵⁶ Congress delegated to the Patent Office the ability to prescribe regulations specifying what applicant behavior amounts to a failure to engage in reasonable efforts to conclude prosecution.¹¹⁵⁷ The Patent Office determined that one such behavior is when an applicant submits a supplemental paper or reply after its initial response because this could theoretically cause the patent examiner to restart work on his response (if he had already begun looking at the applicant’s initial submission).¹¹⁵⁸ But many supplemental replies do not actually cause any delay, and Gilead’s was one such example—Gilead submitted a supplemental information disclosure statement (IDS) after previously submitting a response to a restriction requirement, but the examiner did not pick

1151. *Id.* at 1334–36.

1152. *See* *Gilead Scis., Inc. v. Lee*, 778 F.3d 1341, 1343–44 (Fed. Cir. 2015) (noting Congress’s modification of patent terms).

1153. *Id.* at 1344; *see* 35 U.S.C. § 154(b)(1) (2012).

1154. § 154(b)(2)(C)(i); *Gilead*, 778 F.3d at 1344.

1155. 778 F.3d 1341 (Fed. Cir. 2015).

1156. *Id.* at 1348.

1157. 35 U.S.C. § 154(b)(2)(C)(iii).

1158. 37 C.F.R. § 1.704(c)(8) (2011).

up the application (or indeed, even receive the initial response from the mailroom) until well after Gilead submitted the supplemental IDS.¹¹⁵⁹ The Patent Office nevertheless offset Gilead's term adjustment for the 57 days between its initial response and the supplemental IDS, and the Federal Circuit affirmed.¹¹⁶⁰ The panel found that the statute did not speak precisely to this question and thus gave *Chevron* deference to the Patent Office's interpretation, concluding that "a reasonable interpretation of the statute is that Congress intended to sanction not only applicant conduct or behavior that result in actual delay, but also those having the potential to result in delay irrespective of whether such delay actually occurred."¹¹⁶¹

*Mohsenzadeh v. Lee*¹¹⁶² held that adjustments for Patent Office delay during a parent application did not carry forward to extend the term of a divisional application.¹¹⁶³ The statute's plain language resolved the issue because 35 U.S.C. § 154(b)(1)(A) refers to the adjustment of a single patent (and application) throughout:

if the issue of *an original patent* is delayed due to the failure of the Patent and Trademark Office to—

(i) provide at least one of the notifications under section 132 or a notice of allowance under section 151 not later than 14 months after—

(I) the date on which *an application* was filed under section 111(a); or

(II) the date of commencement of the national stage under section 371 in an international application . . .

the term of *the patent* shall be extended 1 day for each day [of delay].¹¹⁶⁴

By contrast, other provisions of the same statute defined the term of a continuing application specifically by reference to the filing date of an original application, which showed that, when Congress wanted to make events in a parent application relevant to the term of the child, it knew how to do so.¹¹⁶⁵ A later statutory amendment adding a provision for international applications confirmed that the phrase "an application" referred only to a singular application.¹¹⁶⁶ The court's decision seems correct as a matter of the statutory text but unfortunate as a matter of policy. When an applicant winds up with a

1159. *Gilead*, 778 F.3d at 1345–46.

1160. *Id.* at 1345, 1351.

1161. *Gilead*, 778 F.3d at 1349.

1162. 790 F.3d 1377 (Fed. Cir. 2015).

1163. *Id.* at 1382.

1164. *Id.* at 1378, 1380 (citing 35 U.S.C. § 154(b)(1)(A) (2012)).

1165. *Id.* at 1382 (discussing 35 U.S.C. § 154(a)(2)).

1166. *Id.*

divisional patent, it is because the Patent Office has issued a restriction requirement. But, here, the Patent Office was four years late in acting on the original application and issuing the restriction.¹¹⁶⁷ The applicant could not have done anything to speed up that process, or to pursue prosecution of the claims that were subjected to the restriction and that wound up in the divisional application.¹¹⁶⁸ Absent a Congressional fix, an applicant's best bets for protecting itself from losing patent term are (1) to fight any late restriction requirements if they are not proper and (2) to proactively separate claims that an applicant expects would be subject to a restriction into different applications, so that each can receive any appropriate term adjustment.

*Daiichi Sankyo Co. v. Lee*¹¹⁶⁹ dealt with some unique procedural issues related to challenging the Patent Office's determination of term adjustment.¹¹⁷⁰ The issues arose after *Wyeth v. Kappos*¹¹⁷¹ held that the Patent Office had been undercounting certain delays.¹¹⁷² The Patent Office set up an interim procedure allowing patentees whose patents were issued after August 5, 2009 to request reconsideration of the term calculations within a 180-day window.¹¹⁷³ Two of Daiichi's patents were issued before August 5, 2009 and so were not eligible for the interim procedure, and Daiichi also missed the 180-day deadline for judicial review under 35 U.S.C. § 154(b)(4)(A).¹¹⁷⁴ Daiichi argued that the Patent Office acted arbitrarily in limiting its interim procedure to patents issued after August 5, 2009.¹¹⁷⁵ The court rejected this argument because the Patent Office acted consistently with Congress's intent that term adjustment disputes be resolved promptly.¹¹⁷⁶ The Patent Office's deadlines made sense because they were tailored to extend the deadlines for agency review to be co-extensive with the deadline for

1167. *Id.* at 1379.

1168. In this respect, a divisional application's claims are different from those in other types of continuing applications, where the applicant has an option to file and pursue them earlier. *Id.* at 1378–79, 1381 & n.1.

1169. 791 F.3d 1373 (Fed. Cir. 2015), *cert. denied*, 136 S. Ct. 1491 (2016).

1170. *Id.* at 1374–75.

1171. 591 F.3d 1364 (Fed. Cir. 2010).

1172. *Id.* at 1366, 1371–72.

1173. *Daiichi Sankyo*, 791 F.3d at 1375–76.

1174. *Id.* at 1376.

1175. *Id.* at 1377, 1380.

1176. *Id.* at 1379–80.

judicial review.¹¹⁷⁷ The court's decision was logical; if Daiichi really thought its interpretation of the statute was right, it could have diligently pursued it from day one (just as Wyeth had done), rather than waiting for the *Wyeth* case to be decided and only then seeking reconsideration of its own case.

These decisions show the value of having a patent prosecutor who is well versed in the specifics of the patent adjustment statute. Prosecution decisions often have profound consequences for patent term. For example, if Gilead had held onto its supplemental IDS until it received the next office action, and then submitted it with a subsequent response, it would not have lost any patent term because it would not have filed a supplemental reply. Likewise, if Mohsenzadeh had fought harder against the restriction requirement or done a better job of separating the claims into multiple applications that would not have triggered a restriction, maybe it would have saved its patent term adjustment argument for the claims that wound up in its divisional application. And, of course, Daiichi should have pushed the *Wyeth* issue sooner. There may well be strategic reasons why a patent prosecutor would sacrifice patent term adjustment for some other goal. But applicants should make sure that any such trade is made in service of a thoughtful strategy, not ignorance.

XI. INTERNATIONAL TRADE COMMISSION AUTHORITY

The International Trade Commission can remedy patent infringement that harms a U.S. domestic industry by issuing an exclusion order to prohibit the defendant from importing or selling products in the United States.¹¹⁷⁸ The Commission is a popular forum for patent owners to file suit because it gives them several advantages. Most are due to the Commission's accelerated schedule. A plaintiff can expect a trial within nine months after the Commission institutes an investigation, with a recommended disposition by the Administrative Law Judge within a year of institution, and a final decision within 16 months of institution. The fast schedule puts defendants at a severe disadvantage. Because a plaintiff knows the suit is coming, it can prepare much of its case before filing. But defendants are often caught by surprise and must

1177. See *id.* at 1380 (deciding that the Patent Office acted within its discretion when concluding "its authority to conduct administrative reviews extends no further than the period for judicial review").

1178. See generally 19 U.S.C. § 1337 (2012) (containing the statutory framework addressing unfair practices in import trade).

scramble to find prior art, respond to discovery, hire an expert, and the like. Filing suit with the Commission allows the plaintiff to get a fast injunction. In most district courts, a plaintiff will not even get to trial for years, much less reach the stage where it may obtain a permanent injunction.

The Commission's sustained popularity and potent remedies have triggered increased scrutiny about the scope of its power and jurisdiction. The Federal Circuit resolved three important issues in this area in 2015, restoring the Commission's authority to address inducement, but eliminating two other sources of its power.

A. Power to Address Inducement

The en banc Federal Circuit restored the Commission's authority to remedy induced infringement in *Suprema, Inc. v. International Trade Commission*,¹¹⁷⁹ reversing a split panel decision that held the Commission did not have jurisdiction to stop inducement if the underlying direct infringement did not occur until after the accused product was imported into the United States.¹¹⁸⁰ The panel's holding, if left undisturbed, would have made it impossible for the Commission to enforce most method patents, because they usually involve cover activity by a U.S. customer that occurs after the customer buys an imported product.

The statutory construction dispute turned on a seeming mismatch in the drafting of the infringement statute (35 U.S.C. § 271) and the Commission's enabling statute (19 U.S.C. § 1337). The infringement statute is written so that a person's activity (e.g., making, selling, using, inducing, etc.) is what infringes.¹¹⁸¹ But the Commission's enabling statute is written to give it in rem authority over "articles that infringe," without referring to a particular person's infringement.¹¹⁸² That is consistent with how patent lawyers

1179. 796 F.3d 1338 (Fed. Cir. 2015) (en banc).

1180. *Suprema, Inc. v. Int'l Trade Comm'n*, 742 F.3d 1350, 1357–63 (Fed. Cir. 2013); see also *id.* at 1371–78 (Reyna, J., dissenting in part) (believing that the Commission should have "statutory authority to stop induced infringement at the border").

1181. See, e.g., 35 U.S.C. § 271(a) (2012) ("[W]hoever without authority makes, uses, offers to sell, or sells any patented invention, within the United States or imports into the United States any patented invention during the term of the patent therefor, infringes the patent."); *id.* § 271(b) ("Whoever actively induces infringement of a patent shall be liable as an infringer.").

1182. 19 U.S.C. § 1337(a)(1)(B) (2012) (designating "[t]he importation into the United States, the sale for importation, or the sale within the United States after importation by the owner, importer, or consignee, of articles that . . . infringe a valid and enforceable United States patent" as an unlawful activity).

colloquially speak, for we often refer to the “accused product” or “infringing product.” But this is really just shorthand, because an article itself cannot infringe a patent. Only a person’s actions with respect to that article—making, selling, using, etc.—are what actually infringe under 35 U.S.C. § 271. So how should we understand the term “articles that infringe” in § 1337, and, in particular, does it imply that the articles must infringe by the time they are imported?

The en banc majority resolved these questions through the interpretive lens of the *Chevron* framework¹¹⁸³ in reviewing the Commission’s statutory interpretation.¹¹⁸⁴ The majority believed that the statutory text did not definitively resolve the question because the term “articles that infringe” in § 1337 “does not narrow the provision to exclude inducement of post-importation infringement,” but instead “introduces textual uncertainty.”¹¹⁸⁵ That the phrase “articles that infringe” is written in the present tense does not require that the infringement must occur before importation—it could just refer to the fact that the provision of the articles is part of an ongoing act of inducement that begins with importation and is completed with a customer’s direct infringement after importation.¹¹⁸⁶ In fact, such a reading would have caused problems with a prior version of § 271(a), which did not make importation a directly infringing act until 1994, and which therefore would have referred only to infringing acts that occur after importation (i.e., making, using, selling).¹¹⁸⁷ If § 1337 were restricted to articles for which infringement is already complete upon importation, then the Commission would not have even reached the issue of direct infringement for many years.¹¹⁸⁸ The upshot was that, under *Chevron* step one,¹¹⁸⁹ the text’s act was ambiguous.¹¹⁹⁰

1183. *Chevron U.S.A. Inc. v. Nat. Res. Def. Council, Inc.*, 467 U.S. 837, 842–43 (1984).

1184. *Suprema*, 796 F.3d at 1345–46 (reviewing the Commission’s interpretation of § 1337 pursuant to *Chevron*).

1185. *Id.* at 1346 (emphasis omitted).

1186. *Id.* at 1347–48.

1187. *Id.* at 1348.

1188. *See id.* (“If Congress meant to forbid the Commission from looking past the time of importation in defining Section 337’s reach, Section 337 would not have reached even garden-variety direct infringement.”).

1189. The first step of the *Chevron* analysis asks whether Congress has spoken directly to the precise issue in question, or whether the statute is silent or ambiguous. *Chevron U.S.A. Inc. v. Nat. Res. Def. Council, Inc.*, 467 U.S. 837, 842–43 (1984).

1190. *Suprema*, 796 F.3d at 1349.

The court thus had to consider, under *Chevron* step two,¹¹⁹¹ the reasonableness of the Commission's view that it could exclude articles that are used to infringe post-importation.¹¹⁹² The majority thought the statutory text supported this view because § 1337 defines as unlawful "the sale within the United States after importation . . . of articles that—(i) infringe," and thus suggested that the Commission could focus on post-importation activity.¹¹⁹³ The majority also pointed to legislative history that suggested the Commission had broad authority to protect U.S. domestic industry, the Commission's long history of making inducement findings, and the fact that Congress enacted the current statutory language in 1988 against the backdrop of the Commission addressing inducement.¹¹⁹⁴ Finally, the Commission's interpretation closed a potential loophole that could have been exploited by foreign infringers:

the practical consequence would be an open invitation to foreign entities (which might for various reasons not be subject to a district court injunction) to circumvent Section 337 by importing articles in a state requiring post-importation combination or modification before direct infringement could be shown.¹¹⁹⁵

The Commission thus reasonably concluded that it had statutory authority to exclude articles that can be used to infringe after importation into the United States.¹¹⁹⁶

Judge O'Malley, joined by Chief Judge Prost, and Judges Lourie and Dyk, dissented.¹¹⁹⁷ The dissenters thought that the statutory term "articles that infringe" was unambiguous and was directed to physical objects that are imported or sold, *not* a method.¹¹⁹⁸ They stressed that method patents can only be infringed under § 271(a) by use, not by

1191. If the statute is silent or ambiguous to the question at issue, the second step of the *Chevron* analysis asks whether the agency's interpretation is a reasonable and permissible construction of the statute. *Chevron*, 467 U.S. at 843.

1192. *Suprema*, 796 F.3d at 1349.

1193. *Id.* at 1349 (quoting 19 U.S.C. § 1337(a)(1)(B)(i) (2012)). Note, though, that this seems to contradict the majority's earlier point that § 1337 would not have covered garden-variety direct infringement before 1994, because § 1337 refers to "sale" after importation, which has always been an infringing act in § 271(a).

1194. See *Suprema*, 796 F.3d at 1350–52 (pointing to legislative history to show that Congress intended to give the Commission broad authority over investigating and remedying unfair trade acts).

1195. *Id.* at 1352.

1196. See *id.* (holding that the Commission's interpretation was reasonable under *Chevron* step two).

1197. *Id.* at 1354 (O'Malley, J., dissenting).

1198. *Id.* at 1355–56.

sale or importation, and thought it significant that § 1337 did not mention use.¹¹⁹⁹ The dissenters also expressed concern that allowing the Commission to exclude articles based on assumptions about post-importation activity could lead to overly broad exclusion orders if the article has both infringing and non-infringing uses:

[T]here is no actual harm to a patentee until an infringing use, and that harm only occurs after importation for method claims such as the ones at issue in this appeal. This is especially true for staple goods like Suprema's scanners, where a broad assertion of the Commission's power could prevent non-infringing goods from entering the country on the basis of what a customer may do with that item once it enters U.S. territory. Such considerations are the purview of the district courts, and fall outside the limited statutory jurisdiction of the Commission.¹²⁰⁰

The dissent dismissed the legislative history and Commission practice as unsupportive of the majority's decision and irrelevant in any event given the plain statutory text.¹²⁰¹ Any policy concerns about creating a "loophole" for infringing method patents was properly addressed to Congress, not the courts.

The majority seems to have the better statutory argument because there really is a mismatch in the person-centric language of § 271 and the article-centric language of § 1337.¹²⁰² It is not clear what Congress intended, or, indeed, if it even thought about method patents when enacting § 1337. And the dissent's suggestion that Congress could simply amend the statute to close any perceived

1199. *Id.* at 1356 (citing *NTP, Inc. v. Research in Motion, Ltd.*, 418 F.3d 1282, 1319 (Fed. Cir. 2005)).

1200. *Id.* at 1356–57 (emphasis omitted); *see also id.* at 1353–54 (Dyk, J., dissenting) (“[Section 1337] does not allow the Commission to enter an exclusion order directed to all of the subject articles, even those that ultimately may never be used to infringe, on the theory that some of the articles may be used in an infringing manner after importation.”). Notice that there would not be a similar problem with allowing the Commission to enforce § 271(c), which everyone agreed it can do because § 271(c) explicitly says that provision of staple articles, is not contributory infringement. *See* 35 U.S.C. § 271(c) (2006) (excluding non-staple articles from contributory infringement liability).

1201. *See Suprema*, 796 F.3d at 1361–66 (O'Malley, J., dissenting) (“Though we need not reach the legislative history or past Commission practice to perform our duty of saying what the law is for unambiguous statutory language, I am unconvinced that any of the ‘evidence’ . . . the majority relies [on] alters a fair reading of the language that . . . Congress agreed to: ‘articles that—infringe’”).

1202. *Compare id.* at 1347 (majority opinion) (“The relevant portions of § 271 define persons’ actions as infringement.”), *with id.* at 1346 (“[Section 1337] refers not just to infringement, but to ‘articles that infringe.’”).

loophole seems unrealistic given the typical Congressional gridlock on even the most uncontroversial issues.

Nevertheless, the dissenters have at least one thing right—the Commission should not be allowed to broadly exclude all importation of a staple article, even when it is sold for use in a non-infringing manner. The majority did not address this point, which seems to leave open the question of whether the Commission must tailor any exclusion order involving a method patent to carve out any imports used in a non-infringing manner. Such a caveat would seem appropriate, indeed necessary. The Commission has no authority to restrain non-infringing conduct because it can address a violation of § 1337 by excluding only “the article concerned,” not articles that are unrelated to the infringement.¹²⁰³

Any carve-out would make exclusion orders difficult to enforce—how is the U.S. Customs and Border Patrol supposed to confirm whether each particular shipment is for the non-infringing, rather than infringing use? Maybe the Commission could deal with this by requiring the importer to include instructions with its articles saying that customers cannot use it in an infringing manner and to send its customers letters warning them against infringement. The Commission could also impose stiff civil penalties (\$100,000 per day) for importers that are caught trying to take advantage of the carve-out to discourage infringement.¹²⁰⁴

B. Digital Transmissions

The statute’s “articles that infringe” language was the source of a second important dispute: do digital transmissions from an overseas defendant into the United States count as “articles” that the Commission can exclude? This has been a pressing issue in recent years, attracting significant commentary.¹²⁰⁵ A split panel in

1203. See 19 U.S.C. § 1337(d)(1) (2012) (“If the Commission determines, as a result of an investigation under this section, that there is a violation of this section, it shall direct that the articles concerned, imported by any person violating the provision of this section, be excluded from entry into the United States . . .”) (emphasis added).

1204. See 19 U.S.C. § 1337(f)(2) (allowing a civil penalty of \$100,000 whenever one violates a cease and desist order issued by the Commission).

1205. See generally Timothy R. Holbrook & Lucas S. Osborn, *Digital Patent Infringement in an Era of 3D Printing*, 48 U.C. DAVIS L. REV. 1319, 1324–25 (2015) (exploring whether the patent system should recognize digital patent infringement, specifically in the context of 3D printing); Sapna Kumar, *Regulating Digital Trade*, 67 FLA. L. REV. 1909 (2015) (arguing that the International Trade Commission lacks jurisdiction over digital information as neither courts nor agencies can control information in the abstract).

ClearCorrect Operating, LLC v. International Trade Commission,¹²⁰⁶ held that they do not, because “articles” must be “material things.”¹²⁰⁷

Applying the *Chevron* framework, the majority held that the statutory text unambiguously resolved the dispute because dictionaries published contemporaneously with the 1922 Tariff Act (which introduced the word “articles”) all defined an article as being a “material thing,” or were consistent with that meaning.¹²⁰⁸ The majority also observed that an “article” must be a physical thing because it cannot be stopped at the border, cannot be “seized” or “forfeited” under one of the other statutory provisions, and is not something subject to “attempted entry” into the United States through a “port of entry,” as contemplated by other statutory subsections.¹²⁰⁹ The Commission’s authority to issue cease and desist orders did not expand its jurisdiction to include digital transmissions because Congress added it in 1974 as a “softer remedy” than exclusion orders and said that “[n]o change [was] made in the substance of the jurisdiction” conferred on the Commission.¹²¹⁰ Moreover, the Commission’s authority under § 1337 has long been tied to the Harmonized Tariff Schedule of the United States, which, of course, lists duties on physical articles.¹²¹¹ The legislative history further supports confining “articles” to material things because it used “articles” interchangeably with the word “goods,” which itself referred to physical items.¹²¹² The statute was thus unambiguous and definitely resolved the issue.

The majority also noted that it would reach the same result even under *Chevron* step two because the Commission’s position was unreasonable.¹²¹³ It criticized the Commission’s analysis of the relevant dictionary definitions, noted that the Commission had ignored contrary definitions without explanation, and, most notably, exposed the Commission’s omission of a phrase from the relevant legislative history, which made the Commission’s authority seem much broader than it really

1206. 810 F.3d 1283 (Fed. Cir. 2015).

1207. *See id.* at 1286–87 (reversing the Commission’s conclusion that “articles” under § 1337(a) included “electronic transmission of digital data”).

1208. *See id.* at 1299.

1209. *Id.* at 1295 (citing 19 U.S.C. § 1337(i)(1),(3) (2012)).

1210. *Id.* at 1296 (quoting S. REP. NO. 93-1298, at 194 (1974), *reprinted in* 1974 U.S.C.C.A.N. 7186, 7327 (1974)).

1211. *Id.* at 1297–98.

1212. *See id.* at 1298–99 (concluding that “goods” and “articles” each were limited to material things, after examining the respective dictionary definitions in place at the time of enactment).

1213. *Id.* at 1300.

is.¹²¹⁴ The Commission also erred by citing recent proposed bills in Congress to expand its authority that had never been passed.¹²¹⁵

Judge O'Malley filed a concurring opinion in which she agreed with the majority's *Chevron* analysis, but also argued that resorting to *Chevron* was unnecessary because Congress had not delegated the Commission any authority to interpret the scope of the term "article."¹²¹⁶

Judge Newman dissented, making several strong points.¹²¹⁷ One was a larger point about statutory interpretation—she thought the meaning of the term "articles" should not be based on existing technology in 1922 and was instead adaptable as technology advanced.¹²¹⁸ Judge Newman thus found it irrelevant (and unsurprising) that the older dictionaries did not mention digital transmission, although she did think some of them defined "articles" broadly enough to cover it.¹²¹⁹ Judge Newman next questioned the majority's assertion that digital transmissions are not material things: "the particles and waveforms of electronics and photonics and electromagnetism are not intangible, although not visible to the unaided eye."¹²²⁰ Judge Newman seems to have a point here—everything is, at some level, composed of subatomic particles.¹²²¹ Moreover, the panel hinted that a thumb drive or CD with the same digital data might count as a physical article that could be excluded.¹²²² Judge Newman rightly noted that there is no pragmatic

1214. *Id.* In particular, the Commission omitted words "in the importation of goods," from the following sentence without adding an ellipsis. *Id.* at 1301; see also S. REP. NO. 67-595, at 3 (1922) ("The provision relating to unfair methods of competition in the importation of goods is broad enough to prevent every type and form of unfair practice and is, therefore, a more adequate protection to American industry than any antidumping statute the country ever had.") (emphasis added).

1215. *ClearCorrect*, 810 F.3d at 1301–02.

1216. *Id.* at 1302–03 (O'Malley, J., concurring).

1217. See generally *id.* at 1304–12 (Newman, J., dissenting).

1218. See *id.* at 1306–07 ("Patents are for things that did not previously exist, including kinds of technology that were not previously known.").

1219. *Id.* at 1307–08.

1220. *Id.*

1221. The Federal Circuit has treated digital data differently on other occasions too, however, including some of its recent jurisprudence under 35 U.S.C. § 101. See *Digitech Image Techs., LLC v. Elecs. for Imaging, Inc.*, 758 F.3d 1344, 1350 (Fed. Cir. 2014) (declining to find a device profile, which was a "collection of intangible color and spatial information," eligible for patent protection because the device profile lacked a physical form); *In re Nuijten*, 500 F.3d 1346, 1357 (Fed. Cir. 2007) (concluding that a transitory, propagating signal is not patentable subject matter under 35 U.S.C. § 101).

1222. See *ClearCorrect*, 810 F.3d at 1290 (majority opinion) ("Here, the only purported 'article' found to have been imported was digital data that was transferred

reason to treat these things differently as digital signals.¹²²³ People now transmit digital data over the Internet rather than mailing someone a thumb drive because it is quicker and cheaper. The panel's interpretation thus hamstrings the Commission's ability to deal with some types of patents in the current age. The court should interpret the statute to keep pace with the modern age.

C. Domestic Industry Must Be Assessed Quantitatively

The Federal Circuit cut back on the Commission's jurisdiction in *Lelo Inc. v. International Trade Commission*,¹²²⁴ although the decision's broader impact remains to be seen. *Lelo* deals with the "domestic industry" requirement, which permits the Commission to issue an exclusion order "only if an industry in the United States, relating to the articles protected by the patent . . . exists or is in the process of being established."¹²²⁵ Such an industry exists if there is "significant" U.S. investment in plant and equipment or U.S. employment of labor and capital, or "substantial investment" in exploitation of the patented technology, including engineering, research and development, and licensing.¹²²⁶

The Commission held that the investment at issue was "significant" and "substantial" in a qualitative sense.¹²²⁷ In particular, the Commission held that the plaintiff's investments in several U.S.-manufactured components of the patented sex toys were "significant," because they were "crucial" to the toys' functionality (allowing the right flexibility and resistance), while also enabling the toys' ability to function as vibrators, even though the components' cost was less than five percent of the toys' overall cost.¹²²⁸

The Federal Circuit reversed, concluding that the statute required that "significant" or "substantial" investment be quantitatively significant.¹²²⁹ The court focused on the statute's plain text: "the terms

electronically, i.e., not digital data on a physical medium such as a compact disk or thumb drive.").

1223. See *id.* at 1309–10 (Newman, J., dissenting) (explaining that the distinction between digital goods transported electronically and digital goods contained in a physical medium has "been discarded as unjustifiable").

1224. 786 F.3d 879 (Fed. Cir. 2015).

1225. 19 U.S.C. § 1337(a)(2) (2012).

1226. *Id.* § 1337(a)(3).

1227. *Lelo*, 786 F.3d at 882–83.

1228. *Id.*

1229. See *id.* at 883–85 (concluding that "qualitative factors alone" are not enough to satisfy § 1337(a)(3)).

'significant' and 'substantial' refer to an increase in quantity, or to a benchmark in numbers,"¹²³⁰ and an "investment" is "an expenditure of money for income or profit or to purchase something of intrinsic value."¹²³¹ Putting these meanings together showed that the statute required "a quantitative analysis in order to determine whether there is a 'significant' increase or attribution by virtue of the claimant's asserted commercial activity in the United States."¹²³² The court added that "[q]ualitative factors cannot compensate for quantitative data that indicate insignificant investment and employment."¹²³³ This conclusion seems correct given the statutory purpose, which is to protect U.S. jobs and investment.¹²³⁴ And the investments in *Lelo* were plainly insignificant when viewed quantitatively—the Commission itself had acknowledged they were numerically "modest."¹²³⁵

The result may be to keep patent owners with more attenuated connections to the United States out of the International Trade Commission. Patent owners will now need to meet their burden of proof with hard numbers, not just a slick tale about the importance of quantitatively minor components. In this respect, the decision mirrors much of the Federal Circuit's damages jurisprudence, which has required patentees to apportion the value of the patented feature, rather than rely on generalities about its importance.¹²³⁶ The Federal Circuit also remarked that those numbers must reflect the true investment in labor, capital, or the other statutory categories—"pricing data" showing what the patentee paid for the components of its patented sex toys did "not reflect the magnitude of labor expended to produce the components, or the amount the suppliers invested in their equipment to fulfill [the patentee's] orders."¹²³⁷

D. Exclusion Order Civil Penalties

The final case dealing with the Commission's power involved an issue that has received increasing attention in recent years—what is the effect on a judgment entered by a tribunal when another tribunal

1230. *Id.* at 883.

1231. *Id.* (quoting WEBSTER'S THIRD NEW INTERNATIONAL DICTIONARY 1190 (1986)).

1232. *Id.* at 883.

1233. *Id.* at 885.

1234. *See* *Suprema, Inc. v. Int'l Trade Comm'n*, 796 F.3d 1338, 1345 (Fed. Cir. 2015) (en banc) (describing § 1337's purpose as aiming to curb "unfair trade practices that involve the entry of goods into the U.S. market via importation").

1235. *Lelo*, 786 F.3d at 885.

1236. *See supra* Section VI.A and accompanying text.

1237. *Lelo*, 786 F.3d at 884.

enters judgment invalidating the patent? One recent decision holds that a final judgment in a reexamination (rendered by the Patent Office, affirmed by the Federal Circuit, and not subject to further review) nullifies a non-final district court damages judgment.¹²³⁸ Another decision vacated a district court's non-final injunction (and an accompanying civil contempt sanction) based on the Patent Office's intervening invalidation of the claims.¹²³⁹

The Federal Circuit faced a variation on these themes in *DeLorme Publishing Co. v. International Trade Commission*,¹²⁴⁰ where the Commission had imposed an over \$6 million civil penalty for violation of a consent order, and the defendant sought to set aside the penalty on the ground that a district court had since invalidated the patent.¹²⁴¹ A split panel affirmed the penalty based on the language of the consent order.¹²⁴² The majority relied on the consent order's statement that its provisions cease to apply when the patent has "expired or been found or adjudicated invalid or unenforceable" to infer that it remains in force until one of those events occurs.¹²⁴³ The consent order did not suggest that an invalidity finding would retroactively revoke the order's effect, and "unambiguously indicates that the invalidation trigger" applies "only prospectively."¹²⁴⁴ Therefore, the order remained binding at the time of the defendant's violation, and the Commission was within its discretion to impose the civil penalty.¹²⁴⁵

The majority distinguished the *ePlus*¹²⁴⁶ decision because the injunction there was non-final at the time the patent was invalidated, and noted that both *ePlus* and *Fresenius*¹²⁴⁷ involved situations where the Patent Office's cancellation of claims rendered the patent void "ab

1238. *Fresenius USA, Inc. v. Baxter Int'l, Inc.*, 721 F.3d 1330, 1332 (Fed. Cir. 2013), *cert. denied*, 134 S. Ct. 2295 (2014).

1239. *ePlus, Inc. v. Lawson Software, Inc.*, 789 F.3d 1349, 1351 (Fed. Cir. 2015), *cert. denied*, 136 S. Ct. 1166 (2016).

1240. 805 F.3d 1328 (Fed. Cir. 2015).

1241. *Id.* at 1331, 1334.

1242. *Id.* at 1333–36. The same panel also unanimously affirmed the district court's invalidity judgment in *DeLorme Publishing Co. v. BriarTek IP, Inc.*, 622 F. App'x 912, 913 (Fed. Cir. 2015), *cert. denied*, 136 S. Ct. 1477 (2016).

1243. *DeLorme*, 805 F.3d at 1334.

1244. *Id.* at 1335.

1245. *Id.*

1246. *ePlus, Inc. v. Lawson Software, Inc.*, 760 F.3d 1350 (Fed. Cir. 2014), *modified by* 789 F.3d 1349 (Fed. Cir. 2015), *cert. denied*, 136 S. Ct. 1166 (2016).

1247. *Fresenius USA, Inc. v. Baxter Int'l, Inc.*, 721 F.3d 1330, 1346 (Fed. Cir. 2013).

initio.”¹²⁴⁸ would seem to be that a district court judgment of invalidity does not render the patent invalid *ab initio*, which is an odd suggestion—why should the Patent Office’s invalidity determination in a reexamination have broader effect than a district court judgment of invalidity? The majority did not say. Interestingly, the majority was composed of two dissenters from the denial of the rehearing *en banc* in *ePlus*, which might provide insight into what is really going on here.¹²⁴⁹

Judge Taranto dissented and would have remanded for the Commission to reconsider its imposition of civil penalties in the first instance now that the patent had been invalidated.¹²⁵⁰ He identified several sources of potential ambiguity in the consent order and noted that the Commission’s lawyers requested a remand rather than outright affirmance.¹²⁵¹

DeLorme may have a limited effect because it was based on the specific language of the exclusion order here. Defendants would be well advised in the future to push for language in any consent order (or, for that matter, any consent decree in district court) that makes the order retroactively void once the patent is invalidated.

CONCLUSION

While the Federal Circuit resolved many interesting patent issues in 2015, plenty of other issues remain unanswered. The next year will bring new directives from the Supreme Court on enhanced damages, claim construction in *inter partes* review, jurisdiction in IPR appeals, design patent damages, and laches. We will have a new *en banc* decision on the on-sale bar. Several other decisions will provide guidance on what works in IPR appeals, and address the Patent Office’s procedural powers in IPR. And we can hope for more guidance on § 101 as more and more district court decisions under *Mayo* and *Alice Corp.* make it through the appellate process.

1248. *DeLorme*, 805 F.3d at 1336 (citing *Fresenius*, 721 F.3d at 1346).

1249. The majority in *DeLorme* consisted of Judges Reyna and Moore, see *DeLorme*, 805 F.3d at 1330, who also dissented from the denial of rehearing *en banc* in *ePlus*, see *ePlus*, 790 F.3d at 1314.

1250. *DeLorme*, 805 F.3d at 1337 (Taranto, J., dissenting in part).

1251. See *id.* at 1337–39 (detailing several reasons for ambiguity in the consent order, one of which being that “until” could be interpreted retrospectively); *id.* at 1337 (noting that the Commission specifically argued that remand was necessary).